11728

RBB
49(m)

C.S.O. M.P. 71/4 VII.

THE ROYAL SANITARY INSTITUTE
LIBRARY

BRITISH GUIANA

REPORT

OF

THE DIRECTOR OF MEDICAL SERVICES

FOR THE YEAR

1946.

Printed for the Government of British Guiana by F. A. Persick, Limited, at
65, Robb and King Streets, Georgetown, British Guiana.

RBB|49 m

22501468364

CONTENTS

		Paragraph	Page
I.	INTRODUCTION	1 - 14	5 - 7

II. FINANCIAL :—

		Paragraph	Page
	Revenue and Expenditure	15 - 17	8
III.	VITAL STATISTICS	18 - 25	8 - 9
IV.	GENERAL REMARKS	26 - 39	9-10
V.	NUTRITION	40 - 46	10-11
VI.	HYGIENE AND SANITATION	47 - 56	11-12
VII.	PUBLIC HEALTH EDUCATION	57 - 60	13

VIII. GENERAL DISEASES :—

		Paragraph	Page
	Nephritis	61	14
	Diseases of the Heart	62	,,
	Intestinal Diseases (including the Enterics and Dysenteries)	63	,,
	Cancer and Other Malignant Tumors	64	,,

IX. COMMUNICABLE DISEASES :—

		Paragraph	Page
	Malaria	65 - 69	,,
	Respiratory Diseases	70	,,
	Bronchitis and Broncho-pneumonia	71	,,
	Influenza	72	15
	Tuberculosis (all forms)	73	,,
	Enteric Fever (including Typhoid and Paratyphoid)	74	,,
	Chicken Pox	75	,,
	Diphtheria	76	,,
	Puerperal Fever	77	,,
	Small Pox	78	,,
	Trachoma	79	,,
	Tetanus	80	,,
	Yaws	81	,,
	Ankylostomiasis	82	,,
	Yellow Fever	83 - 87	,,
	Leprosy	88	,,
	Filariasis	89	,,
	Erysipelas	90	16
	Ophthalmia Neonatorum	91	,,
	Measles	92	,,
	Venereal Diseases	93-100	,,
X.	PUBLIC HOSPITALS	101-102	,,
XI.	THE BOARD OF EXAMINERS, CHEMISTS AND DRUGGISTS	103-105	21
XII.	APPENDICES	106-107	,,

WELLCOME
LIBRARY
+
Ann Rep
WA28
.G66
B86
1946

ANNUAL MEDICAL REPORT

FOR

THE YEAR ENDED 31st DECEMBER, 1946.

1. INTRODUCTION

A. General Character of the Country

British Guiana lies on the North East of the mainland of South America between latitudes 1° and 9° North and between longitudes 56° and 62° West. Its estimated area is 83,000 square miles. 86% of its area is forest; 10.5% savanna, and the remainder consists of the Coastal Belt on which the majority of the population is concentrated. The coastal temperature usually varies between 70° and 90° F, with a mean of about 80.3° F. The temperature of the interior is slightly higher. The annual rainfall of the coast is usually about 91 inches, that of the interior being slightly lower. The coastal belt is flat and most of it lies below high-tide level, being protected from the sea by walls and dykes.

B. Distribution of the Population

2. The estimated population is 381,328, nine-tenths of whom live in the coastal belt, spread along a narrow fringe bordering the coast and the estuaries of the five large rivers, viz., the Pomeroon, Essequibo, Demerara, Berbice and Corentyne. The population is dense in the towns and villages on the coast and at the mouths of the large rivers. The density falls precipitately as one recedes from the coast. Beyond a depth of six to eight miles from the coast line, there are practically no settlements except along the banks of the rivers. Here and in the mining areas of the forest and in the savannas of the interior, there are scattered and sparse settlements of farmers, miners, woodcutters and nomadic aborigines. This distribution of the population renders it extremely difficult and in some cases impossible to afford medical care to a number of areas in view of the formidable distances to be covered, the absence of roads, the comparative lack of river and aerial transport and the paucity of means of communication.

C. Distribution of Medical and Health Services

3. Throughout the year, the activities of the Medical Department were largely restricted to efforts at maintaining adequately the existing medical services. Owing to shortage of staff and other post-war conditions, it was not possible to carry out new projects or to extend previously existing services. An outstanding exception is the inauguration of the Mosquito Control Service which marks a new era in public health work in the Colony.

Medical Staff

4. The authorised medical establishment was never attained during the year. There was always a number of unfilled vacancies. Owing to shortage of staff the Health Officer of the county of Berbice served in the clinical section of the service throughout the year and the Health Officer of the county of Demerara for the greater portion of the year, and extra work and responsibility were thrown on the Deputy Director of Medical Services and the County Sanitary Inspectors. It was not possible to initiate any new projects.

5. A number of the medical districts are too large and populous to be efficiently served by one Medical Officer. For instance, the Government Medical Officer of Port Mourant Medical District in the county of Berbice has charge of a stretch of country twenty-three miles in length and of varying but shallow

depth with a population estimated at 32,000. This District has an estate hospital which serves persons employed on the estates of Port Mourant and Albion. Except in very grave emergency when they may be admitted to the estate hospital, the other inhabitants who constitute more than 50% of the population are dependent on the Public Hospital, Berbice, which is situated at New Amsterdam. The character of the conditions in other medical districts is very similar. Private medical practitioners reside almost exclusively in the towns. Except in Buxton no private practitioner resides and practises in a medical district and the Government Medical Officer is the only available doctor in most of them.

MEDICAL INSTITUTIONS

General Hospitals

6. The colony maintains five general hospitals at Georgetown, New Amsterdam, Suddie, Bartica and Mabaruma. The total bed accommodation at these five hospitals is 993 which is equal to one bed to every 376 persons in the Colony, exclusive of the provision on Sugar Estates. As indicated in the previous paragraph, the intervals between these hospitals are long and distances to be travelled by the sick are great, having regard to the difficulty of travel over rough roads, railway or rivers, and the uncertain and expensive transport appliances available. In the coastal areas where roads are comparatively good, an ambulance service is maintained in connection with each hospital, five ambulances in all being operated by the Medical Department.

Special Hospitals

7. In addition to the general hospitals, there are the following three special hospitals:—

(a) The Mental Hospital at Canje, Berbice, about half a mile from the town of New Amsterdam, with bed accommodation for 748 patients and staffed by a Medical Superintendent and one assistant.

(b) The Leprosy Hospital situated at Mahaica, East Coast, Demerara, 22 miles from Georgetown, with bed accommodation for 405 patients. The present staff is one Medical Officer who also visits Dispensaries and holds regular Clinics throughout the Colony.

(c) The Best Tuberculosis Sanatorium situated on the West Coast, Demerara, opposite Georgetown, with accommodation for 176 patients. The present staff is one Medical Superintendent who is also Tuberculosis Officer of the Colony, the duties of which latter office include attendances at the Georgetown Tuberculosis Dispensary thrice weekly and various less frequent visits to other Dispensaries and Institutions in the three counties of the Colony.

Estate Hospitals

8. These hospitals are the private properties of individual Sugar Plantations. They were required under the Immigration Ordinance but their maintenance and operation are no longer compulsory since immigration ceased in 1917. There are 21 hospitals with a total bed accommodation of 1,409. This is equal to one bed to every 51 persons on Sugar Estates.

Sanitary Inspectors

9. A staff of 49 district sanitary inspectors of the Medical Department serve 81 of the 94 local sanitary authorities of the Village and Country Districts established in pursuance of the Public Health Ordinance, 1934. The sanitary inspectors are under the supervision of three County Sanitary Inspectors, one for each county.

Health Visitors

10. There are 10 health visitors attached to 8 Government rural health centres. This staff is exclusive of 6 health visitors employed by the Infant Welfare and Maternity League in the rural areas and in the town of New Amsterdam; 7 employed by the British Guiana Society for the Prevention and Treatment of

Tuberculosis in rural areas in the counties of Demerara and Berbice and in the city of Georgetown; and 9 employed by the Municipality of Georgetown within the city. The Infant Welfare and Maternity League subsidises 34 midwives in rural districts whose duties combine the care of parturient mothers with antenatal and infant care in districts not served by health visitors. Government health visitors and all nurses of the Infant Welfare and Maternity League are supervised by two Inspectors of Midwives, one for the counties of Demerara and Essequibo and the other for the county of Berbice. The organisation of the health visitors and midwifery service and the distribution of personnel indicate the development of this type of service locally and collaboration between several agencies, viz., the Government Medical Service, the Municipality of Georgetown, the Infant Welfare and Maternity League and the British Guiana Society for the Prevention and Treatment of Tuberculosis. The policy of the Infant Welfare and Maternity League has always been to subsidise midwives only in districts in which the births are considered too few to maintain independent private midwives and to withdraw them from districts to which health visitors have been appointed. It is impracticable for the League to subsidise midwives to many areas with very small scattered populations, where there is insufficient work to justify such subsidies. A state domiciliary nursing and midwifery service coterminous with the field of operation of the Medical Service is an ideal not yet realised.

D. Rise in Cost of Services

11. The mounting cost of services, supplies and equipment is a matter for grave concern. As compared with 1939, the expenditure for salaries and other emoluments rose from $129,205 to $734,305; that of the dietary of medical institutions from $84,832 to $300,000; and that of drugs from $37,972 to $100,000. Similar though less phenomenal increases in cost were experienced in Clothing and Bedding, Sanitary fuel and light, and other items of expenditure. The expenditure of the Medical Service rose from $669,530 which was equivalent to 10.7% of the Colony's revenue in 1939, to $1,521,430 in 1946, being equivalent to 11.1% of the Colony's revenue in the year under review.

12. The increased cost under the above mentioned heads has been due to several unavoidable causes, e.g., the rise in the cost of living, increases of nursing and other staff in keeping with Colonial Medical policy; the steady rise in the cost of essential articles of foodstuffs; the cost of new essential drugs, e.g. Sulpha drugs and penicillin, and their extensive use and the increase in the number of admissions to hospitals and of out-patients treated in hospitals and dispensaries.

E. Lack of Supplies and Equipment

13. There has also been experienced a scarcity of essential supplies, e.g. building materials—lumber, nails, roofing material, etc. Many of these have been unavailable for long periods with the result that building programmes affecting hospitals, health centres, markets, abattoirs, sanitary conveniences, etc., have been delayed and in many instances postponed indefinitely.

F. Objectives

14. With a view to improvement in conditions, this Department recommended that the following items should be given priority of consideration among the projects to be financed from the allocation for Health being considered by the Health Sub-Committee of the Development Committee appointed by His Excellency the Governor in August, 1946 :—

(a) Extensive structural alteration and improvements in the equipment and services at the Public Hospital, Georgetown.

(b) Extension of tuberculosis control measures.

(c) Erection of Cottage Hospitals at Wakenaam and Mahaicony which districts are situated between the Public Hospital, Georgetown, and the Public Hospital, Suddie on the one hand, and between the former hospital and the Public Hospital, Berbice, on the other hand.

(d) Health Education and Propaganda—Intensified Campaign.

(e) Erection of a second Child Welfare Centre in Georgetown.

(f) Extension of Infant Welfare Work in the rural areas. (Increase in subsidy for Midwives, Infant Welfare and Maternity League).

(g) Creation of two new medical districts, thus reducing the size of existing districts.

(h) Training of Sanitary Inspectors.

(i) Extending the scope of Venereal Disease treatment and control.

(j) Structural alterations and improvements at the Public Hospitals, Bartica, Suddie, Berbice, Mabaruma, and the Mental Hospital.

(k) Extension and improvement of the School Dental Service.

(l) The appointment of 5 additional sanitary inspectors and 2 health visitors.

(m) Subsidy to Estate Hospitals to provide for admission of patients not employed on sugar estates.

These proposals have been recommended for the five year period 1947 to 1951.

II. REVENUE AND EXPENDITURE

15. The following is a statement of Revenue for the year 1946:—

Hospitals and Dispensaries	$ 89,732.53
Sale of Milk Badges	244.02
Visiting Fees, Port Health	805.00
Auction Duty	7.92
Affidavit Fees	5.50
Sale of Quinine	2,133.46
Sale of Official Publications	21.28
Houses	2,813.88
Sale of Opium & other drugs	6,290.20
Malariological Survey	5,038.75
Sundry Reimbursments	1,684.88
Chemist & Druggist Examinations	225.00
Miscellaneous	2,107.67
Bacteriological Department	1,546.16
	$112,656.25

16. The following is a comparative statement of expenditure for the past three years:—

1944	1945	1946
$1,390,160.04	$1,316,282.82	$1,521,430.72

17. The percentage of expenditure of Medical and Public Health Services to Revenue of the Colony was :—

1944	1945	1946
9.2%	12.4%	11.1%

III. VITAL STATISTICS

18. The population on the 31st of December, 1946, as estimated by the Registrar-General, was 381,328 (Males—191,203, Females 190,125).

19. There were 13,429 births and 5,891 deaths. The natural increase of population was 7,538.

20. The number of immigrants, 9,529, exceeded the number of emigrants, 9,337, by 192.

21. The actual increase in the estimated population for the year was 7,730 as compared with 6,394 in 1945.

22. *Births*: 13,429 births (males—6,777; females—6,652) were registered. This is equivalent to a birth-rate of 35.2 per 1,000 of the population as compared with 36.2 in 1945 and 28.6 in 1944.

23. The number of still-births registered was 671, a ratio of 5.04 per 100 children born alive. The corresponding figure for 1945 was 5.5.

24. *Deaths*: 5,891 deaths (males—3,109; females—2,782) were registered, giving a crude death rate of 15.4 per 1,000 of the population as compared with 17.7 per 1,000 in 1945 and 21.9 in 1944. 77.7 per cent. of the deaths were medically certified as compared with 75.1 per cent in 1945.

25. (a) *Infant Mortality*: The number of deaths under one year of age was 1,166, a rate of 87 per 1,000 registered births, as compared with 101 per 1,000 in 1945, and 136 per 1,000 in 1944.

(b) *Maternal Mortality*: The maternal mortality rate for 1946 was 9.9 per 1,000 live births as compared with 11.0 in 1945 and 13.0 in 1944.

NOTE: Please see appended statistical graphs.

IV. GENERAL REMARKS

Staff

26. The medical staff as authorised was comprised of:—

1 Director of Medical Services
1 Deputy Director of Medical Services
1 Deputy Director of Medical Services (Supernumerary)
2 Health Officers
1 Medical Superintendent, Public Hospital, Georgetown
1 Surgeon Specialist, Public Hospital, Georgetown
1 Bacteriologist and Pathologist
1 Senior Physician, Public Hospital, Georgetown
1 Assistant Surgeon, Public Hospital, Georgetown
1 Medical Superintendent, Mental Hospital
1 Medical Superintendent, Leprosy Hospital
1 Medical Superintendent, Best Tuberculosis Hospital
1 Ophthalmologist
1 Medical Officer, Ear, Nose and Throat
1 Venereal Diseases Officer and Dermatologist
1 Radiologist
28 Medical Officers

Dr. H. B. Hetherington, O.B.E., Director of Medical Services, was absent from the colony on vacation leave from the 3rd of August, to the end of the year. Dr. O. M. Francis acted as Director of Medical Services during this period.

Appointments

27. Dr. L. G. Eddey was transferred from the Gold Coast as Deputy Director of Medical Services of this Colony. He arrived and assumed duty on the 27th of June.

28. Dr. R. H. Georges was transferrred to this Colony from Tortola, Virgin Islands. He assumed duty as Government Medical Officer on the 25th of January.

29. Dr. J. J. Cameron, retired Medical Officer of Jamaica, was appointed to act as Medical Superintendent of the Mental Hospital from the 28th of March to the 4th of August.

30. Dr. L. P. Greson was transferred from St. Lucia, West Indies. He arrived in this Colony and assumed duty as Government Medical Officer on the 26th of April.

31. Mr. A. G. Leacock, F.R.C.S., was appointed Assistant Surgeon in June. He arrived in the Colony and assumed duty on the 24th of June. Mr. Leacock acted as Surgeon Specialist from the 14th of July to the end of the year, during the absence on leave of Mr. J. D. Grierson, F.R.C.S. During this period, Dr. M. O. Luck acted as Assistant Surgeon.

32. Dr. H. E. P. Yorke was appointed Government Radiologist in July. He arrived in the Colony and assumed duty on the 25th of July.

33. Mr. J. A. Jewell, F.R.C.S., was appointed Ear, Nose and Throat Officer (part-time) on the 29th of August.

34. Dr. E. F. J. Dunlop was transferred from the Falkland Islands as Government Ophthalmologist. He arrived in the Colony and assumed duty on the 27th of December.

35. Dr. S. Fitz-James acted as a part-time Medical Officer throughout the year, and Dr. B. L. Evan Wong as a part-time Medical Officer from the 29th of September to the end of the year.

Resignations

36. Dr. P. G. Barrow, Health Officer, resigned on the 31st of December in order to take up appointment with the Municipality of Georgetown as Medical Officer of Health.

37. Dr. A. S. Chiekrie proceeded on six months leave prior to resignation on the 31st of December.

Leave

38. The following officers were on vacation leave during the year :—

Dr. J. Glavina from 14th November, 1945 to 25th July.
Dr. J. W. D. Ferdinand from 1st January to 13th July.
Dr. A. W. H. Smith from 21st March to 16th December.
Dr. A. Bornstein from 30th April to 26th August.
Mr. J. D. Grierson from 14th July to 31st December.
Dr. F. A. Viapree from 14th July to 31st December.
Dr. E. G. H. Payne from 28th August to 31st December.

Dr. L. H. Wharton was absent from the Colony from 16th October to 17th November at a Conference on Leprosy held at Rio de Janeiro.

39. During the whole of the year the Department worked with a depleted staff of Medical Officers and Medical Specialists. Part-time officers were employed for varying periods at the Public Hospital, Georgetown, and Mr. Jewell, F.R.C.S., of the St. Joseph's Mercy Hospital, served as part-time Ear, Nose and Throat specialist of the hospital from 29th August to the end of the year. Considerable difficulty was experienced in carrying out the normal duties of the Department owing to the shortage of staff.

V. NUTRITION

40. *General.* The Nutrition Committee formed in 1943 continued to function throughout the year. Propaganda work was again undertaken in two village centres by means of simple talks, discussions, and cookery demonstrations. In addition, pamphlets were prepared by members of the Committee on two subjects, viz. : "A Low Cost Diet" and "Analysis of Local Foodstuffs." A further item entitled "Plan of Diets" was compiled by the Supervising Dietician, Children's Breakfast Centres. All three pamphlets were given publicity through the Bureau of Publicity and Information.

41. A permanent nutrition exhibit, using foodstuffs modelled in balata, was assembled during the year with the financial assistance of the Food Production Committee and is now being displayed at suitable public Exhibitions and senior schools.

42. As a preliminary step towards interesting restaurant proprietors in the featuring on their menus of such nutritious foods as are produced locally, two members of the Committee visited the most frequented restaurants in Georgetown and inspected their cooking facilities, and interviewed their managements. Further steps are contemplated when importation of restaurant materials enables the standard of equipment in these establishments to be improved

43. Arrangements were made through the courtesy of the British Council for the showing of films on nutritional and general health education subjects to members of the Nutrition Committee and kindred organisations during the latter part of the year.

44. The Committee also submitted a memorandum to the Health Sub-Committee of the Development Committee on a major nutrition project designed to measure in detail the basic nutritional needs of the Colony.

45. *Flour Experiment.* At the request of the Secretary of State, experiments as to the keeping qualities of ordinary bakers' flour (74% extraction) are being undertaken by the Agricultural Chemist and the Principal, Carnegie Trade School, both of whom are members of the Nutrition Committee.

46. *Basic Stocktaking.* Representations made to Government during the year have resulted in the appointment as from 1st Januarry, 1947, of a Basic Stocktaker who will undertake the following programme of investigational surveys :—

(i) Colony's Agricultural Products — What is actually being produced.

(ii) Population Statistics — The total amount of food materials required by the various age groups, taking into account environment and food habits of the population. Translation of the food materials into nutrients.

(iii) Correlation of the findings in (i) and (ii) to ascertain to what extent the Colony's present standards of production are able to provide its nutritional needs.

(iv) Assuming objectives (i) and (ii) are achieved, to work out what excess, if any, of certain foodstuffs would be available to be exported to other Colonies in the Caribbean area.

VI. HYGIENE AND SANITATION

47. In respect of the routine activities of the Central Board of Health, the year has been one of steady maintenance. Special activities undertaken included a survey of the layout situation in both the Plaisance-Sparendaam area of the East Coast, Demerara, and the Hague Settlement area on the West Coast, Demerara, as also a review of the sanitary condition of all cinemas in the Colony. In addition, valuable insight into certain of the public health problems of the more remote areas of the Colony was obtained from the visits of the Senior Executive Officer of the Board to the Rupununi, North West and Upper Berbice River areas of the Colony during the second half of the year. Except for short periods, there were no full-time Health Officers available for duty. The resulting heavy burden falling upon the County Sanitary Inspectors was eased as and when possible by district visits by the Board's Senior Executive Officer.

48. More important statistics indicative of the routine work of the Board are as follows :— domiciliary inspections — 108,829; inspection of special type premises such as provision shops, bakeries, and cowpens — 8,684; annual recertification in respect of rice factories — 186; and approval of new coconut-oil factories—22. A total of 1,594 samples of foodstuffs was taken, principally from the milk industry and 215 prosecutions resulted. In selected areas, routine measures taken against the spread of communicable diseases generally were reinforced by the use of D.D.T. residual spraying. The most satisfactory results obtained have led to the adoption of a large-scale mosquito control programme for 1947 which is the subject of a separate comment in this report.

49. *Housing and District Planning.* The Board dealt with 1,189 building applications; of these, 1,121 were approved. Sixty plans for the layout of land for building purposes were approved and completion of prescribed preparatory works was registered in 73 instances. Limitation of new building to sites properly laid out continued, as also the policy of relaxing, subject to prescribed safeguards, certain legal requirements, insistence upon which was deemed inexpedient in the public interest at the present time. Of the building permits issued during the year, 179 were rendered necessary as a result of this policy. Throughout the Colony building procedures continued to be hampered by the scarcity of nearly all forms of essential building materials.

50. No major developments were found possible in the direction of providing up-to-date sewerage systems, and drainage activities were limited to maintenance.

51. Extension of the existing well water supplies in rural areas was effected as materials became available.

52. Much public health legislation was under active consideration during the year. Regulations in respect of buildings in the urban sanitary district of Georgetown were made law. Regulations respecting the sanitation of coconut-oil factories and of schools in rural areas were approved by the Board and are awaiting final action by the legal authorities. Amendments to existing regulations in respect of mosquito control throughout the Colony were drafted by the executive officers of the Board as were also certain amendments to the Public Health Ordinance to provide for the creation of District Boards and for the more explicit definition of Sanitary Districts. The views of the Law Officers on all these legislative proposals are now awaited preparatory to discussion by the Board. A new Quarantine Ordinance was finally gazetted and is expected to become operative very early in 1947.

Tuberculosis Society

53. The British Guiana Society for the Prevention and Treatment of Tuberculosis continued its activities during the year. The notifications of tuberculosis for the whole year were 275 as compared with 260 in 1945. The number of deaths from the disease during the year was 189 giving a death rate of 0.5 per 1,000 of the population as compared with 0.52 in 1945. A summarised report on the Best Sanatorium is appended. (See Appendix II).

Infant Welfare and Maternity

54. The Infant Welfare and Maternity League continued to play its part in the care of mothers, expectant mothers and infants. The number of clinics held throughout the year was 1,317 with 24,109 attendances of childrern and 11,406 expectant mothers. The various local Committees displayed their usual activity in the raising of funds for the various needs of clinic infants and mothers and have thereby maintained a lively interest in this work on the part of those it is intended to benefit.

55. Owing to the difficulty of obtaining building materials, no new health centres were erected during the year. The two Inspectors of Midwives and the health visitors attached to the eight existing health centres are on the staff of the Medical Department. There are also five League Health Visitors. There is collaboration between the Department and the League.

56. A building at Vreed-en-Hoop, which was erected in 1934, from public subscriptions in that district and used as a clinic centre by the League, was handed over by the Trustees to Government in October, 1946, and has been repaired and used as a health centre for that area.

VII. PUBLIC HEALTH EDUCATION

A. School Medical Service.

B. Training of Health Personnel.

A. School Medical Service.

57. School Health Activities for the year 1946 included :—

(a) Routine medical examinations of elementary pupils of fourteen city schools (Georgetown) and four rural schools. Of 3,200 children examined by school nurses, 500 were selected to see the School Medical Officer for his consideration and more detailed examination with the parents present. Of these, 400 received a complete physical examination by the School Medical Officer. Another 400 received incomplete physical examinations by the School Medical Officer. In the preparatory divisions, 140 children were routinely examined by the School Medical Officer. The chief defects were dental caries and nutritional defects.

(b) *CORRECTION OF DEFECTS* — Many necessitous children suffering from nutritional defects were referred to the Education Department for free meals. Children suffering from chronic malaria, anaemia, recurrent attacks of bronchitis, helminthiasis, scabies and other skin conditions were treated by the School Medical Service. Children suffering from acute conditions were referred to private medical practitioners for treatment.

(c) *HEALTH EDUCATION.*

(i) Of parents—Of 500 parents invited to be present on the day of examination of their children, nearly 400 responded and were instructed on facts relating to the health of their individual children.

(ii) Of teachers—Thirty lectures were given by the School Medical Officer to teachers assembled in Georgetown, Essequibo, New Amsterdam and Corentyne. Twenty lecture demonstrations were given by school nurses to these same teachers. A course of 60 lectures in child psychology and school hygiene was given to teachers in training at the Teachers' Training College.

(iii) Of pupils—School nurses gave several demonstration lessons—about 100—to pupils in city and rural schools, special attention being paid to their personal health habits, e.g. the care of teeth and nails, etc.

(d) *WORK WITH AND FOR THE NUTRITION COMMITTEE* — Many talks and demonstrations to parents at Beterverwagting Village on the East Coast were given.

(e) *PHYSICAL AND MENTAL EXAMINATION* of the pupils at Belfield Girls Reformatory School were carried out.

(f) *SAMPLING SURVEYS* to determine the relation between fluorine in the water and dental caries, etc. About 450 pupils have been examined to date, the samples having been taken from Ruimveld, Houston, Agricola Methodist and Anglican Schools, and No. 5 Congregational School.

58. The report of the School Medical Officer has been published separately.

B. Training of Health Personnel

59. Thirteen local students completed a two-year course of training to qualify as Sanitary Inpectors. In addition, two students from the British West Indies received special training in this Colony during the year. Eight local nurse-midwives and one nurse-midwife from Dominica were given a six-month course in public health nursing.

60. The training of these students was arranged by a local committee of the West Indies Board of Examiners of the Royal Sanitary Institute comprised of representatives of both Government and Municipal Health Departments. The trainees all sat for the Institute's examinations which were held in British Guiana during November. Apart from this basic training, members of the sanitary staff were afforded the opportunity of preparing for the Meat and Food Inspector's and Tropical Hygiene Examinations of the Institute respectively. Ten inspectors sat for the former and eight for the latter examination. Two

senior Sanitary Inspector returned to the Colony in April, having completed a six-months' course in advanced public health technique at the Public Health Training Station in Jamaica. The training courses were financed by grants made for the purpose under the Colonial Development and Welfare Act.

VIII. GENERAL DISEASES

61. **Nephritis.** The total number of deaths was 505, a rate of 1.3 per 1,000 of estimated population in 1946, as compared with 480 deaths, a rate of 1.3 per 1,000 in 1945.

62. **Diseases of the Heart.** There were 458 deaths registered in the Colony from all forms of heart diseases as compared with 508 in 1945.

63. **Intestinal Diseases** (excluding the enterics and dysenteries). The number of deaths registered in 1946 was 338 as compared with 311 in 1945.

64. **Cancer and other Tumours:** The total number of deaths was 175 as compared with 153 in 1945. Fifty-seven cases of malignant disease with 15 deaths were treated in Public Hospitals.

IX. COMMUNICABLE DISEASES

65. **Malaria.** There were 447 deaths recorded from Malaria during the year as compared with 673 in 1945.

66. The following has been extracted from the report of the Honorary Government Malariologist which has been published separately:—

During 1946 the Malarial Research Service was entirely engaged on investigations on D.D.T. for the control of *A. darlingi* and other disease-carrying and house-frequenting mosquitoes. The aim has been to bring under D.D.T. control large blocks of population in order to test, on an adequate scale, the effect of this form of prevention on the incidence of malaria as indicated by changes in the spleen and parasite rates. By extending control to whole registration districts, it is also becoming possible to study in successive years its effect on the trend of vital statistics: birth rate, death rate, infant and maternal mortality, still-birth rate, and vital index.

67. During 1946 an aggregate of 8,283 buildings were sprayed and a total of 48,198 persons brought under D.D.T. protection. Mosquito house captures, carried out systematically in treated areas, have shown consistent and drastic reduction in the numbers of *A. darlingi* and *Aedes aegypti* extending over many months. The duration of the effective period varies with the type of building and of its occupants. Larval surveys made in areas treated exclusively by residual D.D.T. spraying of houses indicate that *A. darlingi* has practically disappeared from the immediate neighbourhood.

68. Throughout the year the Service has operated in close collaboration with the Sugar Estate Authorities who have supplied the full time services of their medical adviser and the D.D.T., kerosene, transport and supplementary labour required for the spraying of plantation villages. On sugar estates 1,937 buildings have been sprayed and a population of 15,379 is already enjoying the many benefits of D.D.T. protection.

69. In the second half of the year, spraying was carried out in co-operation with the Yellow Fever Service on a scale well beyond that of a limited experimental investigation; practical control of Malaria, Yellow Fever and Filariasis by D.D.T. has been started and over 50,000 people are already enjoying its benefits. This work will be greatly extended in 1947 with the merger of the Malaria Research and the Yellow Fever Services into a single and completely reorganised Mosquito Control Service.

70. **Respiratory Diseases:** Pneumonia was responsible for 169 deaths throughout the Colony with a rate of 0.4 per 1,000 as compared with 240 deaths with a rate of 0.7 per 1,000 in 1945.

71. **Bronchitis and Broncho-pneumonia** caused 445 deaths with a rate of 1.2 per 1,000. During 1945 the number of deaths was 617 with a rate of 1.7 per 1,000.

72. **Influenza.** 360 cases were treated in Public Hospitals with 1 death. The deaths registered as due to this disease throughout the Colony were 7 as compared with 8 in 1945.

73. **Tuberculosis (all forms).** This disease caused 189 deaths in the Colony with a death rate of 0.5 per 1,000 as against 195 deaths with a death rate of 0.52 per 1,000 in 1945 and 206 deaths with a death rate of 0.56 per 1,000 for 1944.

74. **Enteric Fever (including Typhoid and Paratyphoid).** There were 508 cases with 83 deaths as compared with 442 cases and 91 deaths in 1945 and 674 cases and 118 deaths in 1944.

75. **Chicken Pox.** There were 67 cases as compared with 250 cases in 1945.

76. **Diphtheria.** There were 28 cases with 8 deaths as compared with 38 cases and 5 deaths in 1945.

77. **Puerperal Fever.** There were 9 notifications with 9 deaths; during the previous year there were 10 cases with 8 deaths.

78. **Small Pox.** There was no case of Small Pox reported in the Colony during the year. The usual programme of vaccination was carried out.

79. **Trachoma.** There was one case notified, as compared with 2 in 1945.

80. **Tetanus.** 32 cases were treated in Public Hospitals with 9 deaths, as compared with 39 cases and 17 deaths in 1945.

81. **Yaws.** 34 cases were treated in Public Hospitals as against 13 in 1945. There were no deaths. 67 cases were treated in the out-patient department as against 23 in 1945.

82. **Ankylostomiasis.** 217 cases were treated in Public Hospitals with 4 deaths compared with 198 cases and 2 deaths in 1945. The deaths registered as due to this disease throughout the Colony were 5 as compared with 4 in 1945.

83. **Yellow Fever.** There was no reported case of this disease during the year.

84. The following extract has been taken from the Annual Report of the Chief Officer, Yellow Fever Service, which has been published separately :

85. "Considerable progress has been made during the last year. *Aedes aegypti* have been eradicted in all the areas in which Aedes control measures were undertaken. Maintenance work will have to continue indefinitely.

86. "The use of D.D.T. and a higher standard of efficiency in the field have been responsible for the progress made. It has been established that residual D.D.T. house-spraying is cheaper and more effective than routine *Aedes aegypti* control methods.

87. "The Yellow Fever Service will merge with the Malaria Service under the heading "Mosquito Control Service" in 1947. A colony-wide programme of mosquito control by D.D.T. house-spraying will be undertaken by the new service to combat malaria and filariasis and to maintain *Aedes aegypti* eradication."

88. **Leprosy.** There were 30 new admissions to the Leprosy Hospital. 604 out-patients attended the various clinics. (Please see also Appendix VII).

89. **Filariasis.** 30 deaths were registered from this disease as compared with 32 in 1945.

90. **Erysipelas.** One death was registered from this disease during the year.

91. **Ophthalmia Neonatorum.** 17 cases were notified as compared with 21 cases in the previous year.

92. **Measles.** There were 2 cases treated as in-patients at Public Hospitals during the year with no deaths.

93. **Venereal Diseases.** The following table gives the number of cases of venereal diseases treated as in-patients in Public Hospitals for the last two years :—

SYPHILIS						Soft Chancroid	Gonorrhoea
Year	Primary	Secondary	Tertiary	Hereditary	State not Indicated		
1945	114	43	153	11	60	25	399
1946	96	55	99	13	37	288	485

94. The number of Novar senibillon and other injections given for syphilis and other forms of venereal diseases at the Public Hospitals was 32,562 as compared with 30,522 in 1945.

95. The following shows the number of cases of Venereal Diseases treated on Sugar Estates for the past two years :—

	1945	1946
Gonorrhoea	122	197
Chancroid	5	—
Syphilis	29	44

Venereal Diseases Clinic, Public Hospital, Georgetown:—

96. **Syphilis:** 808 new cases were admitted for treatment as compared with 894 in 1945.

97. **Gonorrhoea:** There were 1,756 new admissions as against 1,320 in 1945.

98. **Defaulting:** There was the usual high incidence of defaulting.

99. **Attendance:** 5,169 patients attended the clinic during the year as against 5,582 in 1945.

100. Leaflets were distributed at the clinics and talks were given to individual new cases. (Please see also Appendix III).

X. *PUBLIC HOSPITALS*

101. Summaries of the reports on the Public Hospitals at Georgetown, Berbice and Suddie are published in the Appendices IV, V and VI respectively.

102. The following table shows the diseases treated in these hospitals as well as the Public Hospitals at Bartica, Mabaruma and Kamakusa :—

No.	Corresponding Number in International Lists.	DISEASE	Public Hospital, Georgetown			Public Hospital, Berbice			Public Hospital, Suddie			Public Hospital, Bartica			Public Hospital, Mabaruma			Public Hospital, Kamakusa			TOTAL		
			In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients
			Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases
1.	1 (a)	Typhoid Fever	225	33	—	49	14	—	13	5	2	5	1	—	—	—	—	—	—	—	292	53	2
	2 (b)	Paratyphoid Fever ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2.	3	Typhus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3.	4	Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4.	5	Undulant Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5.	6	Small Pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
6.	7	Measles	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—
7.	8	Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	9	Whooping Cough ..	—	—	—	1	—	20	—	—	—	—	—	—	7	—	23	—	—	—	8	—	43
9.	10	Diphtheria	29	1	2	4	3	—	4	—	—	1	—	—	—	—	—	—	—	—	38	4	2
10.	11	Influenza																					
	11 (a)	(a) With respiratory complications	2	—	50	—	—	—	—	—	—	1	—	6	—	—	—	—	—	3	3	—	59
	11 (b)	(b) Without respiratory complications	336	—	468	9	1	57	5	—	1	—	—	—	7	—	24	—	—	—	357	1	550
11.	12	Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12.	13	Dysentery																					
	13 (a)	(a) Amoebic	42	4	81	12	1	—	—	—	3	2	—	—	2	—	3	—	—	—	58	5	87
	13 (b)	(b) Bacillary	8	1	20	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	1	20
		(c) Unclassified ..	45	1	—	—	—	14	17	—	4	—	—	1	—	—	14	3	—	15	65	1	48
13.	14	Plague																					
	14 (a)	(a) Bubonic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	14 (b)	(b) Pneumonic ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	14 (c)	(c) Septicaemic ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14.	16	Acute Poliomyelitis ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
15.	17	Encephalitis lethargica..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16.	18	Cerebrospinal Fever ..	—	—	—	—	—	—	1	1	—	1	1	—	—	—	—	—	—	—	2	2	—
17.	21	Rabies	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18.	22	Tetanus	22	5	—	9	4	—	1	—	—	—	—	—	—	—	—	—	—	—	32	9	—
19.	23	Tuberculosis of the respiratory system ..	87	19	2	27	9	7	10	4	3	5	2	—	9	3	30	1	—	3	139	37	45
20.	24—32	Other tuberculosis diseases	8	—	8	—	—	—	—	—	—	—	—	—	4	—	23	—	—	—	12	—	31
21.	33	Leprosy	9	—	—	5	1	—	2	—	2	—	—	—	5	—	—	—	—	—	21	1	2

No.	Corres-ponding Number in International Lists.	DISEASE	Public Hospital, Georgetown			Public Hospital, Berbice			Public Hospital, Suddie			Public Hospital, Bartica			Public Hospital, Mabaruma			Public Hospital, Kamakusa			TOTAL		
			In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients
			Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases
22.	34—35	Venereal Diseases																					
	34(a), 34(b)	(a) Syphilis	193	7	2031	64	2	30	19	2	3	20	2	60	4	—	7	2	1	7	302	14	2138
	35	(b) Gonorrhoea ..	368	1	3176	63	—	15	36	—	10	18	—	65	—	—	19	—	—	33	485	1	3318
	36	(c) Other V.D. ..	214	6	2125	48	5	13	22	—	4	4	—	57	1	—	8	1	—	5	290	11	2212
23.	37	Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
24.	38	Malaria																					
		(a) Benign tertian ..	212	—	72	45	3	—	91	4	7	12	—	4	1	—	73	—	—	—	361	7	156
		(b) Subtertian ..	161	5	120	30	2	—	97	3	7	1	—	—	—	—	—	2	—	—	291	10	127
		(c) Quartan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		(d) Unclassified ..	602	18	2188	333	24	868	107	16	408	117	1	983	116	6	360	21	—	248	1296	65	5045
25.	44—46	Blackwater Fever ..	2	1	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	3	2	—
26.	39	Kala-azar	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
27.	39	Trypanosomiasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
28.	39	Yaws	6	—	—	1	—	—	10	—	—	—	—	—	17	—	65	—	—	2	34	—	67
29.	39	Other protozoal diseases	101	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	101	—	—
30.	40	Ankylostomiasis ..	64	1	84	23	1	—	20	2	3	6	—	27	104	—	305	—	—	18	217	4	437
31.	42	Schistosomiasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
32.	41—42	Other helminthic diseases	27	—	348	6	—	45	8	—	26	19	1	215	4	—	295	—	—	—	64	1	929
33.	15, 19, 20 36, 43, 44	Other infectious and|or parasitic diseases ..	154	8	386	1	—	57	8	—	5	11	1	—	—	—	—	—	—	—	174	9	448
34.	44—55	Cancer & other tumours:																					
	45—53	(a) Malignant ..	37	13	42	18	—	—	—	—	—	—	—	—	2	2	—	—	—	—	57	15	42
	54	(b) Non-malignant ..	148	25	53	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	150	25	53
	55	(c) Undetermined ..	11	—	—	6	—	—	14	4	—	—	—	—	3	—	2	—	—	—	34	4	2
35.	56—57	Rheumatic conditions ..	—	—	1290	55	—	347	17	—	274	—	—	—	9	—	39	—	—	56	81	—	2006
36.	59	Diabetes	104	13	318	16	6	78	15	3	—	3	1	2	1	—	1	—	—	1	139	23	400
37.	60	Scurvy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	—	—	—	—	—	7
38.	61	Beriberi	1	—	—	—	—	—	1	1	—	—	—	—	1	—	—	—	—	—	3	1	—
39.	62	Pellagra	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6	—	—
40.	58, 63, 64	Other Diseases—																					
		(a) Nutritional ..	298	44	1085	57	4	903	38	8	261	13	—	78	41	5	230	3	1	—	450	62	2557
		(b) Endocrine glands and general ..	22	4	198	2	—	43	—	—	—	—	—	—	5	—	—	—	—	—	29	4	241
41.	70—74	Diseases of the blood and blood-forming organs	509	19	25	58	3	653	12	4	142	—	—	—	12	—	290	—	—	—	591	26	1110

No.	Corresponding Number in International Lists.	DISEASE	Public Hospital, Georgetown			Public Hospital, Berbice			Public Hospital, Suddie			Public Hospital, Bartica			Public Hospital, Mabaruma			Public Hospital, Kamakusa			TOTAL		
			In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients
			Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases
42.	75—77	Acute and Chronic poisoning	112	2	—	6	2	—	1	—	—	2	—	—	1	—	—	—	—	—	122	4	—
43.	82	Cerebral Haemorrhage ..	124	25	5	14	9	—	5	4	—	5	1	—	—	—	—	—	—	—	148	39	5
44.	83—87	Other diseases of the Nervous System ..	345	41	572	198	35	612	35	1	30	21	—	19	52	4	220	—	—	7	651	81	1460
45.	88	Trachoma	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—
46.	88	Other diseases of the eye and annexa ..	268	1	206	39	—	293	18	—	18	4	—	46	5	—	49	1	—	9	335	1	621
47.	89	Diseases of the ear and mastoid sinus	75	—	317	25	—	121	13	—	15	2	—	23	1	—	18	—	—	—	116	—	494
48.	90—103	Diseases of the Circulatory System:—																					
	90—95	(a) Heart Diseases ..	448	107	478	97	21	278	3	—	—	35	6	30	1	—	25	—	—	14	584	134	825
	96—103	(b) Other circulatory diseases	124	11	493	106	12	885	164	16	52	5	1	—	6	1	38	1	—	16	406	41	1484
49.	106	Bronchitis	303	15	1712	84	13	748	43	—	735	33	—	85	66	—	223	2	—	249	531	28	3752
50.	107—109	Pneumonia:—																					
	107	(a) Broncho-pneumonia ..	30	15	6	15	8	—	4	1	—	2	1	—	4	3	—	1	1	—	56	29	6
	108	(b) Lobar-pneumonia	165	11	3	13	7	—	22	6	—	14	2	—	5	2	3	2	—	3	221	28	9
	109	(c) Otherwise defined	38	7	273	2	—	—	—	—	1	7	—	4	—	—	16	—	—	—	47	7	294
51.	104, 105 110—114	Other diseases of the Respiratory System ..	469	29	314	134	3	3493	68	4	120	14	—	1215	8	1	28	1	—	53	694	37	5223
52.	119—120	Diarrhoea and enteritis:																					
		(a) under 2 yrs. of age	5	1	89	15	1	50	5	1	10	1	1	68	2	—	6	—	—	4	28	4	227
		(b) over 2 yrs. of age	112	8	75	38	—	62	10	1	17	27	—	48	10	5	18	1	—	7	198	14	227
53.	121	Appendicitis	68	—	—	25	—	61	7	—	1	—	—	—	1	—	1	—	—	—	101	—	63
54.	122	Hernia, intestinal obstruction	181	17	115	30	5	52	33	4	—	6	1	—	1	1	—	1	—	—	252	28	167
55.	124	Cirrhosis of the liver ..	11	5	10	2	1	—	3	—	—	—	—	—	—	—	—	—	—	—	16	6	10
56.	125—127	Other diseases of the liver and biliary passages	123	12	410	15	—	71	35	1	21	1	—	39	6	—	47	—	—	6	180	13	594
57.	115—118, 123, 128 129	Other diseases of the digestive system ..	348	11	665	135	10	901	81	—	195	13	—	156	24	—	38	5	—	63	606	21	2018
58.	130—132	Nephritis (all forms) :																					
	130	(a) Acute	18	15	72	7	2	76	13	2	—	—	—	—	4	—	42	2	—	—	44	19	190
	131	(b) Chronic	130	27	98	39	7	220	54	10	51	5	2	30	2	2	15	1	1	9	231	49	423

No.	Corresponding Number in International Lists.	DISEASE	Public Hospital, Georgetown			Public Hospital, Berbice			Public Hospital, Suddie			Public Hospital, Bartica			Public Hospital, Mabaruma			Public Hospital, Kamakusa			TOTAL		
			In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients	In Patients		Out Patients
			Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases	Cases	Deaths	Cases
59.	133—139	Other non-venereal diseases of the genito urinary system ..	1233	40	314	257	3	—	132	4	105	20	—	110	6	—	50	—	—	2	1648	47	581
60.	140—150	Diseases of pregnancy, childbirth and the puerperal state :																					
	140, 141	(a) Abortion ..	222	1	16	67	—	—	12	—	—	9	—	—	2	—	—	—	—	2	312	1	18
	142	(b) Ectopic gestation	8	—	—	1	—	—	1	1	—	—	—	—	—	—	—	—	—	—	10	1	—
	145—146	(c) Toxaemias of pregnancy ..	22	10	18	15	3	—	2	—	24	3	1	—	—	—	—	—	—	—	42	14	42
	148—150	(d) Other conditions of the puerperal state	29	22	100	25	8	—	55	12	—	1	1	—	12	—	63	—	—	—	122	43	163
61.	151—156	Diseases of the skin, cellular tissue, bones and organs of locomotion	2605	15	2194	354	5	1069	423	2	335	139	2	1554	2	—	—	11	—	86	3534	24	5238
62.	157—161	Congenital malformation and diseases of early infancy :																					
	158	(a) Congenital debility (children under one year)	56	46	—	4	4	—	—	—	—	—	—	—	2	—	15	—	—	—	62	50	15
	159	(b) Premature birth ..	118	42	—	6	6	—	3	3	—	1	1	—	2	1	—	—	—	—	130	53	—
	160	(c) Injury at birth ..	17	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	5	—
63.	162	Senility	130	20	255	30	—	58	21	2	5	17	—	26	15	—	32	—	—	—	213	22	376
64.	163—198	External causes :																					
	163—171	(a) Suicide	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—
	172—198	(b) Other forms of violence	1080	22	5278	394	9	470	—	—	—	72	—	—	9	2	—	—	—	—	1555	33	5748
65.	199—200	Ill-defined causes :	346	2	84	59	—	30	62	—	324	30	—	—	—	—	87	—	—	177	497	2	702
		Pregnancy (non-delivery)	501	—	365	105	5	—	50	—	—	11	—	38	22	—	—	—	—	—	689	5	403
		Normal Labour ..	1491	—	—	315	—	—	216	—	—	66	—	—	85	—	—	—	—	—	2173	—	—
		Not Sick	272	—	73	63	—	—	21	—	—	14	—	—	23	—	—	—	—	—	393	—	73
		Not diagnosed	—	—	—	—	—	—	—	—	—	9	—	609	—	—	—	—	—	—	9	—	609
		Attendances for repeat medicines	—	—	9915	—	—	7381	—	—	715	—	—	838	—	—	80	—	—	126	—	—	19055
		TOTAL	15681	814	38697	3686	264	20071	2183	132	3939	828	30	6436	734	38	2933	62	4	1224	23174	1282	73300

XI. BOARD OF EXAMINERS, CHEMISTS AND DRUGGISTS

103. The Board of Examiners, Chemists and Druggists, met four times during the year.

104. Lectures in Elementary Chemistry and Pharmaceutical Chemistry were given to candidates intending to sit the First Professional and Final Examinations for Chemists and Druggists.

105. The examination for candidates qualifying for the First Professional and Final Examinations scheduled to take place on the 26th of October, 1946, was postponed—a date to be fixed during the early part of 1947.

XII. APPENDICES

106. The following summarised Annual Reports are appended :—

Appendix I — Central Medical Laboratory, Georgetown.
Appendix II — Best Sanatorium, West Coast, Demerara.
Appendix III — Social Diseases Clinic, Georgetown.
Appendix IV — Public Hospital, Georgetown.
Appendix V — Public Hospital, Berbice.
Appendix VI — Public Hospital, Suddie.
Appendix VII— Leprosy Hospital, Mahaica.
Appendix VIII— Mental Hospital, Fort Canje.

107. Statistical Graphs.

H. B. HETHERINGTON,
Director of Medical Services.

APPENDIX I.

Summary of the Annual Report of the Bacteriological Department, by Dr. B. B. G. Nehaul, Government Bacteriologist and Pathologist.

In the year 1946, the number of routine examinations carried out at the Central Medical Laboratory, Georgetown, was 32,073, and at the Branch Laboratory, Public Hospital, Georgetown, 17,163, making a total of 49.236, while the examinations at Best numbered 3,248, Public Hospital, Berbice 1,547, Public Hospital, Suddie 2,464, Leprosy Hospital 2,097, and Public Hospital, Bartica 972.

Owing to resignation and other causes, changes had to be made in the allocation of staff, and the technical assistant was withdrawn from the laboratory at the Public Hospital, Bartica in August, 1946. It is hoped to replace him early in 1947. It was unfortunate that Mabaruma was without a technician for another year. It has not been possible to provide accommodation, but arrangements have already been made to provide quarters in 1947. In both Bartica and Mabaruma, the Resident Surgeons carried out simple laboratory examinations.

STAFF

General

Besides the Government Bacteriologist and Pathologist, a clerk and typist-clerk, 17 technicians and 2 laboratory attendants are employed at the Central Medical Laboratory. The Public Hospital, Georgetown, provides an attendant for work in the branch laboratory attached to the hospital.

With the exception of the branch laboratories at the Public Hospital, Georgetown, and the Leprosy Hospital, to each of which two technicians are attached, each branch laboratory is in the charge of one technician. In view of the high importance and delicacy of the experimental therapeutical work being done at the Leprosy Hospital which requires frequent laboratory checking, the services of two technicians are considered very necessary.

Professional And Clinical

One Bacteriologist and Pathologist
One Clerk, Class II
One Typist-clerk
Two senior technical assistants
Five junior technical assistants
*Six junior technical assistants

Branch Laboratories are operated at the Public Hospitals, Georgetown, Berbice, Suddie and Bartica, and at the Best Sanatorium and the Leprosy Hospital.

There are two attendants at the Central Medical Laboratory, and one attendant at the Public Hospital, Georgetown Branch Laboratory.

On account of the increase of diagnostic work for the Social Diseases Clinic, an additional technician was appointed during the year.

---

* These were appointed and attached to the Central Medical Laboratory for training.

Summary Of Work Done At The Branch Laboratories

Nature of Specimen and examination performed.	Central Medical Laboratory	Public Hospital Georgetown	Best Hospital	Berbice Hospital	Suddie Hospital	Leprosy Hospital	Bartica Hospital
Blood.							
A. Parasitological	1,746	5,089	345	702	1,424	28	599
B. Harmatological	2,379	655	263	29	263	588	14
C. Serological	15,745	—	—	—	—	72	81
D. Cultural	307	—	—	—	—	—	—
E. Chemical	461	—	—	—	—	—	—
Faeces.							
Parasitological	471	953	97	175	257	45	110
Cultural	1,537	—	—	—	—	—	—
Chemical	40	—	—	—	—	—	—
Urine.							
Chemical & Microscopical	1,345	680	253	88	176	180	39
Cultural	1,047	—	—	—	—	—	—
Kidney Function Test ...	24	—	—	—	—	—	—
Sputum.							
Microscopical	384	574	2,224	60	160	8	35
Cultural	1	—	—	—	—	—	—
Transudates & Exudates.							
A. Cerebro-spinal fluid ...	123	—	—	—	—	—	—
B. Urethral, prostatic, cervical & vaginal secretions.	4,081	9,207	13	195	23	—	85
C. Conjunctional secretion	86	—	—	—	—	—	—
D. Throat Swabs	367	—	—	3	4	—	8
E. Others	460	—	48	5	7	—	1
Examinations.							
For Mycebact-leprae ...	47	—	4	7	—	1,248	—
Miscellaneous.	* 1,422	5	1	283	150	—	—
Grand Totals	32,073	17,163	3,248	1,547	2,464	2,097	972

Summary For 1946 And Corresponding Figures, 1945.

	1945	1946
Central Medical Laboratory	30,989	32,073
Laboratory at Public Hospital, Georgetown	16,619	17,163
Laboratory at Best Hospital	3,101	3,248
Laboratory at Public Hospital, Berbice	2,752	1,547
Laboratory at Public Hospital, Suddie	2,205	2,464
Laboratory at Leprosy Hospital	1,355	2,097
Laboratory at Public Hospital, Bartica †	1,225	972
Laboratory at Public Hospital, Mabaruma ‡	—	—
	58,066	59,654

---

* This figure includes 153 Spoilt Specimens.

† No technical assistant was attached to Bartica from August to December, 1946.

‡ No technical assistant was attached to Mabaruma for the whole year, 1946.

COMMENTARY

While it is true that clinical pathology comprises a fair proportion of our work, 1946 has seen the growth of work of a public health nature.

Routine clinical work has to be done. The Branch Laboratory at the Public Hospital, Georgetown, was responsible for 17,163 examinations of a simple nature. One cannot help looking forward to the time when the Public Hospital, Georgetown would have a Clinical Pathology Laboratory to play its part in Public Health work.

General practitioners are showing an increasing interest in laboratory investigations and not only are they making use of laboratory facilities, but frequently visit the Central Medical Laboratory with the object of discussing their patients and asking advice as to possible investigations. It is encouraging to note that physicians consider the Pathologist, not merely a medical technician, but a medical practitioner.

The total number of examinations carried out at the Central Medical Laboratory was 32,120 compared to 30,989 for last year. This represents a slight increase. It ought however, to be pointed out that certain examinations have of necessity been refused, because of shortage of chemicals and equipment.

The work done at the branch laboratory at the Public Hospital, Georgetown, shows a slight increase on the figure for the previous year (16,619). The total examinations for Georgetown were 49,293 or approximately 150 examinations daily. It is not possible for one pathologist to supervise this amount of work daily, and in view of the frequent absence of the pathologist from headquarters on other duties, provision seems necessary for the training of an assistant pathologist when a Medical Officer is available. Without the cooperation, zeal and enthusiasm of the technicians, it would have been impossible to do this large volume of work. It should be pointed out that the Senior Technician has been of the greatest help.

ENTERIC FEVERS

In 1945, 699 Widals were done, but in 1946—848, of which 414 were positive, the majority being B. typhosus and one being B. paratyphosus C. Of 307 Blood cultures, not necessarily for typhoid, B. typhosus was isolated in 58; and of 1,504 samples of faeces cultured for B. typhosus, B. typhosus was isolated in 441. A number of these were "repeat" examinations of stools of patients in hospital prior to their discharge. In the previous year, the number of samples of blood put up for culture was 210, and among these B. typhosus was isolated in 38 and B. paratyphosus C. in 3, while of 788 samples of faeces B. typhosus was isolated in 13 only. It is true that in 1946 there was a small epidemic in the environs of Mahaica, but the fact that typhoid is endemic in the colony ought to be stressed. Sometimes it is difficult to interpret the result of a Widal. At the same time, one may well ask why typhoid is not more widespread when people still live under primitive sanitary conditions. One may hazard a guess that people become naturally immunised. It will be apparent too that this year's work has shown a definite improvement in the ability to isolate B. typhosus. For example, of 1,504 samples of faeces, B. typhosus was isolated in 441 or approximately 30%. Whereas, in the previous year, of 788 samples of faeces, B. typhosus was isolated on 13 occasions or approximately 2%. This is a very great difference, for faeces are sent only from patients clinically suspected to be suffering from typhoid fever and from convalescent cases.

The technician in-charge of the Bacteriological section was taught the technique of using selective media and although the work was consequently increased, the results obtained justified the additional labour and expense. The following selective media were used—Tetra-thionate Chalk Broth with added Brilliant Green to give a concentration of 1 in 200,000, Bismuth sulphite Agar, MacConkey Agar and S.S. Agar (Difco). Using these media, of 530 stools examined, 371 or 70% positives were obtained. Percentage positives obtained were :—

Wilson and Blair Bismuth Sulphite	37.4%
Tetra-thionate Chalk Broth with Brilliant Green	29.6%
S.S. Agar (Difco)	16.5%
MacConkey Agar (direct plating)	16.5%

For this work all the faeces tested were from bacteriologically diagnosed cases of typhoid. It was noticed that while the use of one or more media gave a negative result, another might give a positive and that only by using a combination of methods were the chances of isolating B. typhosus increased. For routine work, it was found that the selective media giving satisfactory results were Tetra-thionate Chalk Broth with Brilliant Green and Wilson and Blair Bismuth Sulphite.

This work was purely a preliminary survey to study the behaviour of local strains on selective media used during routing work for patients.

DYSENTERY

The rarity with which organisms of the Dysentery groups have been identified is striking considering the prevalence of Bacillary Dysentery. Looking through the Annual Reports for the past nine years one finds B. dysenteriae isolated as follows :—

Year	Organism	Occasions	
1938	B. dysenteriae (flexner)	2	3
1938	B. dysenteriae (unidentified)	1	
1939	B. dysenteriae (flexner)	1	
1940	B. dysenteriae	0	
1941	B. dysenteriae	0	
1942	B. dysenteriae (flexner)	1	
1943	B. dysenteriae (unidentified)	2	
1944	B. dysenteriae (unidentified)	3	
1945	B. dysenteriae	0	
1946	B. dysenteriae (flexner)	5	

Here, one has to ask why are dysentery organisms so rarely identified. In 1946, 33 stools were examined. The explanation is a two fold one—Medical men are apt to treat their patients without bacteriological investigation and those who do request examination of faeces, send samples that are too old. It is hoped with the use of selective media and the co-operation of medical practitioners, to study the prevailing organisms in the colony. (The Government Bacteriologist had the opportunity of studying an epidemic of Sonne Dysentery in an Institution early in 1947).

DIPHTHERIA

This year, C. diphtheriae was found on microscopic examination in 5 out of 52 throat swabs and on cultural examination in 28 out of 270 throat swabs. The corresponding figures for last year are 9 out of 277 swabs on microscopical examination and 33 out of 255 specimens on culural examination. Again one is struck by the low figures. Preliminary trial was made of a selective medium (Tellurite), but the sample is too small to draw conclusions as to the prevalent types.

The explanation is not apparent when so few cases of the disease occur in a school population of approximately 12,000 in Georgetown.

VENEREAL DISEASES

Of 14,535 Kahn tests done, 3,174 or 22% were positive, while of 315 Laughlen tests done 18 or 5.7% were positive. The Laughlen test is done as routine before Blood Transfusions, and in ordinary work only as a Screening test.

On several occasions, the number of Kahn tests done had to be curtailed as the equipment and staff available could not deal with the volume of work. The figure shows a slight increase over that of last year. In the Central Laboratory 2,544 smears (prostatic, urethral or cervical, etc.) were examined and 140 were found positive while in the Branch Laboratory, Public Hospital, Georgetown, 9,207 smears were examined of which 1,369 were positive. This gives a total of 11,751 for the two laboratories, representing a small increase over last year. For the whole colony, 12,067 smears from the urethra, cervix, prostate, etc. were examined and in 1,597 or approximately 12% were organisms resembling N. gonorrhoeae found.

In 44 out of 1,537 cases or approximately 3% were N. gonorrhoeae isolated on culture. This figure will appear small compared with the number of smears done. The explanation is simple for cultural examination is made use of after treatment in certain cases only. The Gonococcal Complement Fixation Test is not done owing to lack of equipment and staff.

The estimated number of examinations—Kahn tests and smears for gonococcus—carried out for the Social Diseases Clinic is approximately 80 daily, and the greater part of this type of work done in the Laboratory is for the Clinic.

The Medical Officer in charge of the Clinic has supplied me with the figures for the year 1946.

Total number of new applicants	3,874
Total number of cases dealt with (new and old)	5,169
Total number of attendances	39,824

It will be apparent that if only four examinations were requested, approximately 20,000 examinations—Kahn Tests or Smears—would have had to be done for the Social Diseases Clinic. Provision was made during the year to deal with the additional work. It would not be out of place to point out that if the Venereal Diseases Officer is to carry out a complete programme, full support should be given him by the laboratory. It is futile to think of extending the work of Venereal Diseases control without at the same time making the necessary provision in the laboratory and in any such schemes, it is necessary for the laboratory to take its full share of the work.

MALARIA

There has been a decrease in the incidence of positive findings on examining blood films.

The following table shows the result for 1946 :

Laboratory	P. falciparum		P. Vivax		P. Malariae	
Central Medical Laboratory	151	(49.5%)	154	(50.5%)	—	—
Public Hospital, Georgetown	375	(61.7%)	231	(38.0%)	1	—
Public Hospital, Berbice ..	43	(36.1%)	76	(63.9%)	—	—
Public Hospital, Suddie ..	180	(39.8%)	271	(59.9%)	1	—
Leprosy Hospital	2	(33.3%)	4	(66.6%)	—	—
Public Hospital, Bartica	—	—	39	(100%)	—	—
Best Hospital	—	—	—	—	—	—
Total for whole colony (1946)	751	(49%)	775	(51%)	2	—
Total for whole colony (1945)	1699	(52%)	1585	(48%)		

From the figures it would appear that P. falciparum and P. vivax are equally distributed when the figures of the Central Medical Laboratory are considered. Patients in the Public Hospital, Georgetown, are collected from a very wide area. In the Berbice and Suddie districts there appears to be a predominance of P. vivax. Both this year and last year Bartica showed a high incidence of P. vivax. Taking the colony as a whole, the two types of parasites, P. falciparum and P. vivax are equally distributed. On the coastland and in Bartica, P. malariae is rare indeed.

FILARIASIS

Experimental work is being continued. Skin tests are still being done and approximately 95% were positive. "The use of Filarial Antigen" made from Dirofilaria immitis together with a mixed Streptococcal vaccine has been continued using the method recommended by Dr. P. A. Clearkin, O.B.E., M.D., D.P.H., a former Government Bacteriologist. Investigations are being carried out to try the efficacy of a 10 week treatment. At the requests of three patients Antimony preparations were used in filariasis.

The need of a filariasis clinic was felt and arrangements were made with the Medical Superintendent, Public Hospital, Georgetown, for the bacteriologist to hold the clinic on Fridays from 8 a.m.—9 a.m. in the out-patient department. Of necessity, the number of patients must be restricted, and it will be agreed that children and young adults ought to be given preference.

When studying the aetiology of attacks, one is struck by the previous history of minor injuries to the limbs and in some cases, the presence of interdigital fungus infection. Instruction in simple hygiene of the feet has helped. Besides, bed rest during the acute attack and some time after can do much to prevent swelling of the legs. Use of shoes, rest, massage and bandaging the affected leg during the day and keeping the limb elevated at night have produced satisfactory results apart from the use of Filarial Antigen. It is not possible to go into details of this interesting work in an annual report.

INTESTINAL PARASITES.

Table of Results—All Laboratories 1946.

	Total No. of Specimens Examined	E. Histolytica	A. duodenale	S. Stercoralis	A. lumbricoide	T. Trihiura	O. Vermicularis	Others
Central Medical Laboratory	471	2	36	3	12	11	1	—
Public Hopsital, Georgetown, ...	953	42	234	35	23	9	1	2
Public Hospital, Berbice	175	5	49	—	3	3	—	4
Public Hospital, Suddie	257	16	93	—	9	—	1	—
Public Hospital, Bartica	110	5	45	—	7	—	—	—
Leprosy Hospital	45	—	12	—	—	—	—	—
Best Hospital	97	1	21	2	1	1	—	—
Total	2,108	71	490	40	55	24	3	6
Total number of positives	689 (or 33% of all specimens examined)							
% of positves		10.3%	71%	5.8%	8%	3.4%	0.4%	0.8%

Hookworm infestation is prevalent. For the whole colony, of 2,108 specimens examined, 490 or approximately 23% showed ova. The proportion is practically the same as that of last year.

The other findings need no comment except that on one occasion, vegetative forms of Balantidium coli were discovered in the faeces of a woman from a rural area.

BACTERIOLOGICAL EXAMINATION OF WATER AND DAIRY PRODUCTS

Fifty samples of water and 154 samples of milk and dairy products were examined.

There has been a decrease in the number of water examinations as the Demerara Bauxite Company has undertaken its own examinations. At last people are becoming more conscious of the need for regular examinations of water to be used for various purposes and it is anticipated that there will be an increase of this type of work in the new year. Arrangements have already been made with the laboratory to carry out periodical examinations of its products by a dairy.

No requests have been received in connection with the sanitation of restaurants and utensils used therein, but the city of Georgetown has granted permission to the Bacteriologist to carry out certain investigations. Unfortunately, owing to lack of equipment and material, this has had to be postponed.

It is well known that the city of Georgetown has begun work on a potable water supply scheme. This will entail further expansion.

BLOOD TRANSFUSION SERVICE

In the latter part of the year, the laboratory undertook the summoning of donors for blood transfusion. The previous system through the steward's office, Public Hospital, Georgetown, caused confusion and although additional work was incurred, yet this scheme worked more smoothly in our experience.

Plans were discussed for the formation of a blood bank. The manufacturing room in the Public Hospital compound was handed over for this work. This was suitably prepared, and there now exists a relatively dust-free cabinet for the preparation of apparatus and solutions.

There has been a slow response from the public to our request for donors. Propaganda in various forms is being used. The bacteriologist gave two broadcast talks at the invitation of sponsors of radio programmes, and one of the talks was given in Hindustani. The Bureau of Publicity and Information is co-operating.

Equipment for a Blood Bank has been placed on order in England, and on its arrival, a Blood Bank will be established.

All the grouping done in the laboratory was for patients requiring blood or for donors to these patients.

ALLERGIC CONDITIONS

The investigation of asthma, allergic rhinitis, uticaria and eczema was continued. The use of a mixed allergen locally prepared for treating asthmatics has proved of benefit especially in children.

MEDICO-LEGAL WORK

To encourage the police to collect suitable specimens, a course of lectures in forensic medicine was given to a group of N.C.O.'s and other officers through the courtesy of the Commissioner of Police. This course was considered experimental, and the experience gained was to be used in arranging systematic instruction for the police.

The men displayed a keen interest in the work and the good results have been demonstrated subsequently.

The Government Bacteriologist and Pathologist has visited the scenes of crimes, performed post-mortem examinations outside hospital, and has given assistance and advice to Government Medical Officers and to the Police. There is always close co-operation between the Government Analyst and himself.

TRAINING OF NURSES

The training of one male nurse at a time to collect laboratory specimens has been continued. During the year; at the request of the Sister-Tutor, Public Hospital, Georgetown, a course of lecture-demonstrations was given to senior nurses. These were based on the syllabus drawn up in M.R.C. War Memorandum No. 11 —The Control of Cross Infection in Hospitals—1944 (H.M.S.O.) Appendix F.

The nurses showed a keen interest.

TRAINING OF MEDICAL LABORATORY TECHNICIANS FROM WEST INDIAN ISLANDS

During the year three technicians from St. Lucia, Dominica and St. Vincent respectively, were attached to the Central Medical Laboratory. Arrangements were made through the Comptroller for Development and Welfare, Dr. P. A. Clearkin, O.B.E., M.D., D.P.H., and the Director of Medical Services, British Guiana, so that men trained at the Caribbean Medical Centre could complete their training in the Central Medical Laboratory. Special attention was directed to public health bacteriology, the preparation of media, and the sterilisation and care of glass-ware. Besides, visits to the Leprosy Hospital Laboratory, Best Hospital (Tuberculosis) Laboratory, were paid to study the examination and microscopic appearance of M. tuberculosis and M. leprae. Besides, each technician was put in charge of the branch laboratory, Public Hospital, Georgetown, for a short period to be given training in simple administrative technique.

EXPENDITURE

The summary of approved estimate for 1946 was (XVIII Medical-Bacteriological Department) :—

Total personal emoluments	$19,011
Total other charges	$ 2,774
Total extraordinary vote	$ 2,357
Total	$24,172

At the time of writing the actual figures for expenditure are not available, but the above will serve as an approximate figure. For the year, the sum of $2,000 was voted for Instruments and Supplies and this was supplemented by an addditional vote of $2,000.

The cost of apparatus and chemicals has risen. The work done by the Laboratory has also increased .

SUMMARY

(1) The total number of examinations for the Central Medical Laboratory was 32,120 and the total for the whole laboratory service was 59,564.

(2) The staff consists of the Government Bacteriologist and Pathologist, two clerks, seventeen technicians, and two attendants.

(3) The first Government Bacteriologist was appointed in 1906.

(4) In the commentary, work of a public health nature has been stressed as development will take place in this aspect of the laboratory service. With improved techniques, it has been possible to isolate B. typhosus in an increasing number of specimens of faeces (30% compared with 2% in the previous year). Some preliminary work carried out with selective media has been described. B. dysenteriac has been isolated on few occasions. Information in connection with C. diphtheriae is scanty. Of 14,535 Kahn tests done, 22% were positive and of 12,067 smears from prostatic or cervical secretions, or other sources, in approximately 12% were organisms resembling N. gonorrhoeae seen.

There has been a decrease in the number of blood films in which malaria parasites were found. P. malariae is rarely seen on the coast-line or in Bartica.

(5) The Central Medical Laboratory assumed responsibility for the Blood Transfusion Service towards the end of the year.

(6) Medico-legal work has increased.

(7) Lectures were given to the police and to senior nurses.

(8) Three West Indian technicians completed their training in the Central Medical Laboratory.

APPENDIX II.

ANNUAL REPORT OF THE BEST HOSPITAL

For the Year ended 31st December, 1946

I have the honour to submit the following report of the working of the Best Tuberculosis Hospital for the year ended 31st December, 1946.

Buildings.

There were no important additions to the buildings in the Best Hospital compound. The storeroom has been enlarged and made rat-proof. A small cabin has been attached to the power house where the electrician on night duty can stay.

Work was started for the enlargement of the kitchen and laundry premises. Concrete pathways were laid out alongside the clothes stands so that laundresses are no more obliged to tread in the muddy earth to hang up the wet laundry.

Work was started on an annexe to the nurses' hostel in order to improve the accommodation of the nurses.

Accommodation.

The capacity of the institution is 176 beds, sub-divided as follows:

94 beds for male patients
66 beds for female patients
16 beds for children of both sexes.

At no time during 1946 has the hospital refused admission to a patient though I have at times been obliged to add one or two beds temporarily to the female section.

Staff.

During 1946 the office staff was increased by the addition of a clerical assistant to the steward. At no time during 1946 has an X-ray technician been available for the Best Hospital. The staff has otherwise been of the same strength as during 1945.

Medical Staff:	1	Medical Superintendent.
Nursing Staff:	1	nurse superintendent
	3	charge nurses
	10	staff nurses
	15	nurse probationers.
Technical Staff:	1	laboratory technician
	1	dispenser.
Office Staff:	1	steward
	1	assistant clerk
	1	clerk issuer.

Other members
of the Staff: .... 1 electrician
1 asst. electrician-mechanic
1 mechanic-lorry-driver
1 asst. mechanic-lorry-driver
2 gatemen
1 carpenter
13 porters
3 seamstresses
6 cooks
6 laundresses
14 wardmaids

also a variable number of casual labourers averaging six.

As in previous years, only Tuberculin positive reactors were accepted on the staff, as long as Tuberculin was available to perform the test. Nurses and other members of the staff were regularly examined at the fluoroscope. One member of the staff showed a suspicious lung infiltration that however cleared in less than three months and was probably not tuberculous.

Dr. P. G. Barrow acted as Medical Superintendent during the absence of Dr. Bornstein on leave from 1st May to 25th August.

Statistical Data.

	Male	Female	Total
Remaining on 31st December, 1945	88	56	144
Admissions during 1946	150	106	256
Discharges during 1946	92	54	146
Deaths during 1946	59	47	106
Remaining on 31st December, 1946	87	61	148
Of the discharges were not tuberculous	14	14	28
Of the discharges were not diagnosed	3	—	3
Tuberculous discharged with consent	39	24	63
Tuberculous left against advice	36	16	52
Daily average number of patients			149.6
Daily average number of male patients			88.1
Daily average number of female patients			61.5
Maximum number of patients			164
Minimum number of patients			135
Maximum number of male patients			95
Minimum number of male patients			80
Maximum number of female patients			73
Minimum number of female patients			54

Cost of Maintenance.

Total expenditure for the year 1946	$88,722.40
From this should be deducted payments by members of the staff for meals	592.10
Net expenditure	$88,130.30

The total number of patient days was 54,612.

The cost of maintenance per capita per diem was	$ 1.61
The total sum spent on dietary was	$42,710.76
From this should be deducted paid for meals	592.10
This leaves	$42,118.66

The total number of patient days was 54,612.

Thus an average cost of dietary per capita per diem was .. .. .77c.

The average cost of dietary including that of the nursing staff per capita per diem was .. .. .65c.

The average cost of maintenance during 1946 is .09c. higher than in 1945. This appears to be due to an increase in the cost of the dietary which in average has risen from .. .62½ to .77c.

Detailed Statistics of Patients.

Average length of stay, figures given in days from the date of admission.

Discharges	Male	Female
Not tuberculous	31	40.7
Tuberculous with consent	331 (39 cases)	274 (24 cases)
Tuberculous against advice or absconded	185 (36 cases)	279 (16 cases)

The length of stay of persons discharged as not suffering from pulmonary tuberculosis is too long. Lack of X-ray facilities is partly responsible for this. Among the females discharged are included the following:—

1 case of bronchiectasis discharged after 79 days.

1 case of lung tumour in a girl of 10 who left after 289 days.

1 case on whom an artificial pneumothorax had been inducted was discharged after 100 days.

1 case of tuberculoid leprosy with lung infiltrations discharged after 59 days.

Of the 115 tuberculous cases who were discharged or absconded, 69 were sputum positive on admission and 46 were sputum negative on admission.

The method of examination was direct microscopic examination; no cultures nor guinea-pig tests were made as a routine owing to lack of facilities.

The 46 sputum negatives on admission remained negative and were negative on discharge. Of the 69 sputum positive cases on admission, 37 were still sputum positive on discharge or at the time of absconding.

Of the male patients discharged with consent—

15 were cases of sputum positive converted to negative with an average length of stay of 659 days.

24 were cases of sputum negative on admission and discharge with an average length of stay of 130 days.

Of the female patients discharged with consent—

9 were cases of sputum positive converted to negative with an average length of stay of 573 days.

14 were cases of sputum negative on admission and discharge with an average length of stay of 93 days.

1 case was sputum positive on admission and discharge.

8 persons sputum positive on admission were negative at the time they absconded or left against advice with an average length of stay of 398 days.

Of 52 persons who absconded or left against advice, 36 had positive sputum.

Deaths.

Of the 106 persons who died in the Best Hospital during the year 1946—

Two were not tuberculous 1 male died of chronic bronchitis and heart failure and 1 female died of heart disease.

Two were tuberculous but the cause of death was not tuberculosis: 1 male died of cerebral congestion and aortic enlargement and 1 female of diabetic coma.

Of the 106 persons who died	**Male**	**Female**	**Total**
Died within 24 hours of admission	1	1	2
Died within 7 days of admission	4	4	8
Between 8 and 30 days of admission	11	5	16
" 31 and 90 do.	11	20	31
" 91 and 183 do.	10	9	19
" 184 and 274 do.	8	3	11
" 275 and 365 do.	2	1	3
" 1 and 2 years do.	7	2	9
After over 2 years from the date of admission	5	2	7

The average length of stay of patients who died in the institution was—

Males	253 days.
Females	144 days.

The average length of stay of patients in the institution on 31st December, 1946 was—

Males	396 days.
Females	348 days.

Age, Race, and Sex of Admissions during 1946.

Age	African		East Indian		Mixed		Chinese		Portuguese		Other European		Ab. Indian		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
0 – 10	2	2	1	1	1	–	–	–	–	–	–	–	–	–	7
11 – 20	8	3	5	7	3	2	1	–	–	1	–	–	1	2	33
21 – 30	14	17	11	5	8	9	–	2	3	2	–	–	1	1	73
31 – 40	19	14	11	10	3	7	3	–	2	2	–	–	3	–	74
41 – 50	15	3	5	3	6	1	3	–	3	2	–	–	–	1	42
Over 50	8	1	3	2	2	2	2	–	3	–	1	–	–	1	25
Age unknown	–	–	–	–	–	–	–	–	–	–	–	–	1	1	2
Total	66	40	36	28	23	21	9	2	11	7	1	–	6	6	256

Pathological Classification of Admissions During 1946 According to Race and Sex

	African		East Indian		Mixed		Chinese		Portuguese		Other European		Ab. Indian		Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Minimum ...	7	5	5	3	2	3	–	–	3	1	1	–	–	–	30
Mod. Advanced	10	9	6	5	7	5	2	1	1	2	–	–	–	–	48
Far Advanced	38	21	20	16	13	12	7	1	7	4	–	–	6	5	150
Not Tb. ...	9	5	4	4	1	1	–	–	–	–	–	–	–	1	25
Not diagnosed	2	–	1	–	–	–	–	–	–	–	–	–	–	–	3
Total	66	40	36	28	23	21	9	2	11	7	1	–	6	6	256

Table Showing Age, Race, and Sex of Patients in Hospital on 31st December, 1946.

	African		East Indian		Mixed		Chinese		Portuguese		Ab. Indian		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
1 – 9	–	3	–	–	–	–	–	–	–	–	–	–	3
10 – 19	4	1	5	–	–	3	–	–	–	1	–	–	14
20 – 29	15	12	6	1	2	13	–	3	3	4	–	2	61
30 – 39	12	6	6	3	6	3	2	–	–	1	3	1	43
40 – 49	3	2	5	–	4	–	–	–	2	–	–	–	16
50 and over	5	1	1	–	1	–	2	–	–	–	–	1	11
Total	39	25	23	4	13	19	4	3	5	6	3	4	148

Pathological Classification of Patients in Hospital on 31st December, 1946, According to Race and Sex.

	African		East Indian		Mixed		Chinese		Portuguese		Ab. Indian		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Minimal	3	3	1	–	1	2	–	–	1	–	–	–	11
Mod. Advanced ...	10	8	5	2	2	5	2	1	1	2	–	2	40
Far Advanced ...	25	14	16	2	10	12	2	2	3	4	3	2	95
Not Tuberculous ...	1	–	1	–	–	–	–	–	–	–	–	–	2
Total	39	25	23	4	13	19	4	3	5	6	3	4	148

Pathological Classification of Persons Discharged During 1946 According to Race and Sex and whether with Consent or Against Advice.

	African				East Indian				Mixed				Chinese				Portuguese				Other Europeans				Ab. Indian				Total
	M		F		M		F		M		F		M		F		M		F		M		F		M		F		
	C*	A†	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	C	A	
Recovered	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Arrested	1	–	–	–	1	–	–	–	1	–	1	–	1	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	6
Quiescent	11	2	6	–	5	–	8	1	7	–	2	1	1	–	–	–	4	–	–	–	1	–	–	–	–	–	1	–	50
Not Quiescent } Minimal... ...	–	2	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	6
Mod. Advanced ...	1	1	1	3	1	3	–	2	–	1	2	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	16
Far " ...	–	7	1	1	–	11	–	4	1	4	–	–	–	2	–	–	–	1	1	2	–	–	–	–	–	–	–	1	36
Not Tb.	8	–	5	–	3	–	5	–	2	–	3	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	1	–	28
Not diagnosed	2	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
Total	24	12	14	4	12	14	13	7	11	5	8	2	2	2	–	–	5	3	1	2	2	–	–	–	–	–	2	1	146

*C = With Consent.

†A = Absconded or against advice.

Tuberculosis Other Than Pulmonary Tuberculosis

As in 1945, intestinal tuberculosis has been a frequent complication. I must again note that the supply of citrus fruits has been very irregular. Tuberculosis of the larynx with or without involvement of the epiglottis is a frequent occurrence in far advanced cases. No case of tuberculosis of the mucus membranes of the mouth nor tuberculosis of the tonsils was seen during 1946.

Not once have tubercle bacilli been found in the urine which is examined for tubercle bacilli as a routine.

Treatments Applied

Bed rest forms the basis of treatment for all. A minimum of two hours' rest twice daily is imposed on all patients. Beyond this routine the degree of rest and the number of hours daily depends on the condition of the patient.

Moderate suralimentation is attained by means of an ample and varied diet divided into six meals daily. Surplus vitamins A and D are given in the form of cod liver oil, emulsion, or malt and cod liver oil. Citrus fruits and greens are relied upon for the supply of vitamin C.

Medication is reduced to the strict minimum. Cough sedation is restricted to unproductive cough, codein being the preferred drug; however tinctura opii with or without tinctura belladonnae is added in far advanced cases. Sputum disinfectants are used only in cases with abundant mixed infected sputum, sodium benzoate, guaiacol carbonate and volatile oils being the preferred drugs. Creosote is not used. Sedation of laryngeal pain is obtained by spraying or painting the larynx and epiglottis with novocaine and phenol solution, or by means of novocaine and phenol containing pastilles.

Ionisation of sodium iodide was not used for laryngeal analgesia for lack of the necessary equipment. Neither Tuberculin nor gold therapy is practised. Postural drainage has been used to great advantage in all cases of lung abscess or of bronchiectasis. Interruption of the phrenic nerve is not practised as an independent method of treatment. Comparable results were obtained by complete bed rest, raising of the feet of the bed and reducing the mobility of the hemithorax by means of sandbags. Artificial pneumothorax therapy is used whenever indicated. Whenever possible, endoscopic section of pleural adhesions is done; the Maurer technique is followed, combining the use of diathermic coagulation with the hot filament section.

The indications for pneumothorax treatment and maintenance of pneumothoraces are somewhat wider than those customary in institutions where other surgical treatments can be applied. I have the impression that even an unsatisfactory collapse prolongs the span of life of the coloured tuberculous patient.

Work Done at the Best Tuberculosis Hospital

On 1st January there were 50 persons receiving artificial pneumothorax treatment, 26 female and 24 male patients. Of these, .36 were in-patients and 14 were out-patients. Of the above number, 3 persons had bilateral pneumothoraces.

On 31st December, 1946, of these 50 patients, 38 were still receiving pneumothorax treatment : 22 females and 16 males. In the 12 others, the treatment was stopped for the following reasons—

Due to extension of the disease in the contralateral lung : 3 cases, one has since died.

Due to adhesive pleuritis and difficulty to refill : 5 cases, one has died.
The pneumothorax was ineffective : 1 case.

Two patients died during the period of treatment; one absconded and later died.

During 1946 pneumothorax inductions were attempted 51 times. Three of these attempts were made at different times on the same person. Nine inductions were unsuccessful. Two persons were admitted from the Public Hospital, Georgetown, with pneumothoraces. Of the 51 persons concerned, only 32 were still receiving treatment on 31st December, 1946, that is 15 male and 17 female patients. Of the other 19 persons—

The induction was unsuccessful in 7 cases.

Absconded 2 persons, one has since died.

Died during the period of treatment—4 persons.

Treatment was discontinued in 2 cases due to marked extension of the disease in the contralateral lung.

Treatment was discontinued in 2 cases due to adhesive pleuritis and difficulty to refill.

Treatment was discontinued in one case because no tuberculous lung lesion could be found.

In 4 cases the induction was done on patients already having artificial pneumothoraces.

On 31st December, 1946 the number of cases of bilateral pneumothorax was 7.

During 1946, 13 patients died who, at one time or another, had received artificial pneumothorax treatment.

On 31st December, 1946 there were 73 pneumothoraces in treatment among 66 patients : 37 female and 29 male patients; of these, 45 were in-patients : 24 female and 21 male.

During 1946—

2,497 pneumothorax refills were given : 1,002 in male patients and 1,495 in female patients.

12 pneumoperitoneum refills were done on 2 persons.

1 thoracoscopy was done.

12 thoracoscopies with adhesion section.

30 pleural punctures and withdrawal of pus or fluid with or without lavage.

1 intrapleural injection of Methylin Blue.

1 intrapleural injection of Penicillin.

4 cases of wound suture.

1 incision of abscess.

15 stomach lavages.

X-Ray Work

No X-Ray technician was available for the Best Hospital and the work had to be done by the Medical Superintendent assisted by a charge nurse. The clinical work was seriously handicapped by the repeated breakdowns for prolonged periods of time of the X-Ray apparatus and by the frequent shortages of X-Ray films.

No X-Ray films were made at the Best Hospital from 1st January to 5th August, 1946. For filming, patients had to be sent to the Public Hospital, Georgetown, and the number of these had to be restricted. As from October till the end of the year there again occurred repeated breakdowns of the X-Ray apparatus. During these periods the transportable apparatus of the Tuberculosis Dispensary, a most unsatisfactory instrument, had to be relied upon.

In all, 1,520 cases were examined at the fluoroscopic screen. 172 cases were filmed.

From 1st January, 1946 till 30th April, 1946—
34 screening sessions were held and 547 cases seen.

From 1st May, 1946 till 25th August, 1946—
17 screening sessions were held and 150 cases seen.

From 26th August, 1946 till 31st December, 1946—
47 screening sessions were held and 823 cases seen.

Of the 1,520 cases examined—

912 were in-patients.

344 were out-patients mainly referred from the Georgetown Tuberculosis Dispensary.

175 were members of the hospital staff, nurses or applicants.

47 were Carnegie Girls' Trade Centre pupils.

42 were policemen examined prior to re-enrolment.

LABORATORY REPORT FOR THE YEAR 1946.

			Total
Sputum—T.B.	Positive	941	
	Negative	1,283	2,224
Gastric lavage—T.B.	Positive	1	
	Negative	14	15
Pleural fluid—T.B.	Positive	6	
	Negative	24	30
Urinalysis			253
Pulmonary puncture—T.B.			1
Nasal smear—T.B.	Positive	Nil	
	Negative	4	4
Skin scraping—fungus	Positive	1	
	Negative	Nil	1
Malaria	Positive	18	
	Negative	314	332
Filaria	Positive	13	13
Blood counts (total and diff.)		12	12
Blood sedimentation rate		251	251
Smears for G.C.	Cervical	9	Negative
	Urethral	3	
	Vaginal	1	13
Pus from facial abscess—T.B.	Negative	1	1
Aural pus—T.B.	Negative	1	1
Stool—A.D. ova	Positive	21	
	Negative	64	
Amoeba	Positive	1	
	Negative	5	
Strongyloides	Positive	2	
	Negative	Nil	
Ascaris lumbricoides	Positive	1	
	Negative	Nil	
Trichuris Trichiura	Positive	1	
	Negative	Nil	
Pin worm	Positive	Nil	
	Negative	2	97
TOTAL NUMBER OF EXAMINATIONS —			3,248

APPENDIX III.

Summary of the Annual Report of the Social Diseases Clinic, Public Hospital, Georgetown, by Dr. C. R. Subryan, (Acting Venereal Diseases Officer).

Staff

One Venereal Diseases Officer
One full-time senior female nurse in charge
One full-time male nurse with status of charge nurse
Two full-time female assistant nurses
Two full-time male assistant nurses
One male welfare officer
One female welfare officer
One clerk.

The services of the part-time assistant Medical Officer were very irregularly available, owing to his other urgent duties.

Clinic Sessions

The days and hours of attendance of the Clinic remain the same as in previous years.

Disease Incidence

The total of applicants for diagnosis and treatment during the year was 5,169 made up as follows :—3,874 new cases and 1,295 old cases. Of the new applicants, 2,637 were diagnosed as suffering from venereal diseases, and 947 were diagnosed as non-venereal disease cases, while 290 cases were undiagnosed.

Syphilis (Table II). 808 new admissions were diagnosed. This number is 86 less than recorded in 1945. The number of new admissions classified as infectious is 386 or 48.3% of the total number of cases diagnosed as syphilitic.

Gonorrhoea. The total number of new cases admitted for treatment was 1,756 of which number 1,286 were in the acute or sub-acute stage of the disease and were of recent infection.

Chancroid. 29 cases were diagnosed among the new applicants during the year. This represents a reduction of 45.3% of the previous year.

Granuloma Pudendi. 21 cases of granuloma pudendi were diagnosed. This number is one less than the number diagnosed during 1944.

Lympho Granuloma Inguinale. 23 cases were diagnosed during the year, showing a reduction of 9 cases on the previous year's figures.

Racial Incidence of Diseases.

The highest incidence of venereal disease infection noted in Table VII was among those of African descent, East Indians ranking next and persons of mixed descent ranking third.

Racial Incidence with Reference to Marital Status.

More married female East Indians and Africans were treated for syphilis and gonorrhoea than their male counter-part. More married male East Indians reported for treatment than married males of African descent. More unmarried males of African descent reported for treatment of gonorrhoea than unmarried males of East Indian descent.

Incidence of Disease with Reference to Occupation (Table X).

Of the male applicants treated at the Clinic, more than 50% were general labourers, and more than 25% were tradesmen. Of the female applicants, 40.3% were domestics, 29.1% housewives, and 10% labourers.

Clinical Activities.

126 diagnostic darkfield examinations were made, of which 26 were positive and 100 negative. 19 repeats were done, 4 proving positive and 15 negative.

Serological Examination. 7,484 examinations were done. 4,087 were diagnostic, 1,145 were repeated and the number of treatment control was 2,252. 101 pre-natal serological examinations were done.

Gonorrhoeal Smears. 3,370 diagnostic smears were taken of which number 1,314 were positive and 2,956 negative. The negative repeats were 599, while 247 showed positive, showing a total of 846. A total of 4,277 treatment control smears were taken of which number 3,167 were negative and 1,110 positive.

Chancroid. 94 tests were taken of which number 62 were negative and 32 positive. Repeats totalled 3, 2 being positive and one negative.

Lympho Granuloma Inguinale. 23 tests were taken of which number 13 were negative and 10 positive.

Granuloma Pudendi. One diagnostic test was done and it proved negative. Donovan bodies were observed in one case out of two examinations.

Trich. Vag. 16 were positive.

Ante-Natal Patients. 177 cases were examined during the year. 35 were diagnosed as non-venereal disease, 20 as venereal disease or syphilis in its various stages, 53 had gonorrhoea, and 69 were undiagnosed.

Field Activities

This branch of the clinic comprises two Welfare Officers who are engaged in follow-up and epidemiological work. Due to the difficulty in transportation and occupation, many patients are unable to attend clinic, thus accounting for the delinquency. Indifference plays a small part.

Propaganda.

Most of the propaganda work has been carried out at the clinic itself. Leaflets outlining the nature of the diseases were issued to all patients attending the clinic.

The Venereal Diseases Officer gave addresses to a few social organisations, and many interesting discussions ensued. In most instances, the need for some kind of V.D. film was stressed, and it would be helpful to have two or three films and a suitable projector for these talks in future.

Summary.

The services of a part-time officer at irregular periods during the year were available.

The total number of new applicants showed a slight decrease on the previous year's figures.

Attendances during 1946 were 39,824 as compared with 38,759 in the previous year. The total number of V.D. cases was 2,637 as compared with 1,678 in the year before. There was an increase of 234 cases of acute gonorrhoea in 1946 over the 1945 figure which was 1,052.

Recommendations.

The necessity for a laboratory service attached to the clinic exists. A small incubator for cultural purposes is needed urgently and a refrigerator for the keeping of stocks of penicillin and other drugs and sera.

ANNUAL STATISTICAL REPORT OF THE VENEREAL DISEASES CLINIC.

TABLE I.

New Cases of 1946 (Male and Female).

Sex	*Sy. 1*	*Sy. 2*	*Sy. E.L.*	*Sy. L.L.*	*Sy. L.*	*Sy. H.*	*Ac. G.*
			Sy. 3				
Male	130	63	57	104	50	10	876
Female	25	46	65	187	61	10	410
Total	155	109	122	291	111	20	1,286

Sex	*Ch. G.*	*Chanc.*	*Gran.*	*L.I.*	*N.V.D.*	*Und.*	*Total*
Male	210	17	13	11	439	162	2,142
Female	260	12	8	12	508	128	1,732
Total	470	29	21	23	947	290	3,874

Sy. E.L. — Early Latent Syphilis.
Sy. L.L. — Late Latent Syphilis.
Sy. L. — Late Syphilis.
Sy. H. — Syphilis Hereditary.

L.I. —Lympho Granuloma Inguinale.
N.V.D. — Non-Venereal Disease.
Und. — Undiagnosed—under observation.

TABLE II.

	New Cases			*Old Cases*		
	M.	F.	T.	M.	F.	T.
Syphilis (Primary)	130	25	155	63	43	106
Syphilis (Secondary)	63	46	109	29	30	59
Syphilis (Tertiary, E.L.)	57	65	122	21	55	76
Syphilis (Tertiary, L.L.)	104	187	291	49	187	236
Syphilis (Tertiary, L.)	50	61	111	52	63	115
Syphilis (Hereditary)	10	10	20	15	15	30
Acute Gonorrhoea	876	410	1,286	165	132	297
Chronic Gonorrhoea	210	260	470	48	48	96
Chancroid	17	12	29	13	10	23
Granuloma Pudendi	13	8	21	15	15	30
Lympho Granuloma Inguinale ..	11	12	23	6	4	10
Total	1,541	1,096	2,637	476	602	1,078
N.V.D.	439	508	947	48	112	160
Undiagnosed	162	128	290	23	34	57
	2,142	1,732	3,874	547	748	1,295

TABLE III.

Attendances.

	M.	F.	T.
Syphilis 1	1,781	769	2,550
Syphilis 2	751	574	1,325
Syphilis (Early Latent)	742	1,161	1,903
Syphilis (Late Latent)	1,532	3,874	5,406
Syphilis (Late)	1,331	1,310	2,641
Syphilis (Hereditary)	174	439	613
Acute Gonorrhoea	6,173	4,209	10,382
Chronic Gonorrhoea	1,474	1,618	3,092
Chancroid	168	191	359
Granuloma Pudendi	376	214	590
Lympho Granuloma Inguinale	86	153	239
Non Venereal Disease	766	818	1,584
Undiagnosed	3,407	5,733	9,140
Total	18,761	21,063	39,824

B.
1941 — 28,381
1942 — 33,197
1943 — 35,173
1944 — 39,269
1945 — 38,759
1946 — 39,824

C. **Intermediate Treatment —**

Male — 67
Female — 1,396
Total — 1,463

TABLE VII.

Racial Incidence of Diseases.

Race	Syphilis			Gonorrhoea			Chancroid			Granuloma			Lymph. I.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T
Europeans	—	1	1	3	—	3	—	—	—	—	—	—	—	—	—
Portuguese	14	11	25	20	19	39	1	1	2	1	1	2	1	—	1
E. Indians	108	110	218	295	217	512	3	2	5	4	2	6	3	1	4
Africans	458	560	1,018	842	519	1,361	23	13	36	22	15	37	10	11	21
Mixed	55	101	156	132	95	227	2	6	8	1	5	6	3	4	7
Chinese	6	—	6	5	1	6	—	—	—	—	—	—	—	—	—
Ab. Indians	1	3	4	—	—	—	1	—	1	—	—	—	—	—	—
Others	1	—	1	2	—	2	—	—	—	—	—	—	—	—	—
Total	643	786	1,429	1,299	851	2,150	30	22	52	28	23	51	17	16	33

Racial Incidence Per Cent.

Race	No. Syphilis	Per Cent.	No. Gonorrhoea	Per Cent.
Europeans	1	.08	3	.16
Portuguese	25	1.74	39	1.81
East Indians	218	15.24	512	23.81
Africans	1.018	71.26	1,361	63.30
Mixed	156	10.90	227	10.55
Chinese	6	.41	6	.28
Abroginal Indians	4	.29	—	—
Others	1	.08	2	.09
Total	1,429		2,150	

APPENDIX IV.

Summary of the Annual Report on the Public Hospital, Georgetown, by Dr. J. Glavina, Medical Superintendent.

Accommodation.

The bed accommodation of this hospital is as follows:—

Males	Females	Total
389	277	666

Staff.

The staff of the hospital consists of the following:—

One Medical Superintendent
One Surgeon Specialist
One Senior Physician
One Assistant Surgeon
One Ophthalmologist (vacant from 1st January to 27th December).
One Venereal Diseases Officer
One Medical Officer— Eye, Ear, Nose and Throat (vacant from 1st December, 1945 to end of year)
Four Medical Officers (three vacancies)
One Government Pharmacist
One Steward
One chief attendant
One electrician
One mechanic in charge of steriliser
Eight hospital clerks
Eight out-patient clerks
Sixteen dispensers
One matron
Three assistant matrons (two temporary)
One Sister Tutor
Five hospital supervisors (one acting)
Two social welfare officers (venereal diseases)
One charge nurse—housekeeper
Twenty-one charge nurses
Ninety-four staff nurses
One hundred and sixty-eight probationers
One sicknurse and dispenser
Twelve seamstresses
Ten cooks
Fifty-three wardmaids
Forty-five laundresses.

Sundry repairs and minor structural alterations to buildings were effected during the year.

Admission of Patients.

There remained on 1st January, 1946, 539 patients, 332 males and 207 females.

There were admitted during the year, 15,142 patients (males 8,230 and females 6,912); of these admissions, 243 were admitted on two occasions and 73 on more than two.

There died in hospital 450 males and 364 females, a total of 814. This gives a percentage of 5.3% males, 5.1% females and 5.2% on the total number treated which was 8,562 males, 7,119 females, a total of 15,681.

The daily average number was 321 males and 293 females, a total of 614.

The highest total number of patients was 682 on the 26th January, 1946, and the lowest was 501 on the 31st December, 1946.

The highest number of males was 374 on the 29th January, 1946, and females 323 on the 21st October, 1946.

The lowest number of males was 269 on the 31st December, 1946, and females 209 on the 1st January, 1946.

The total number of attendances for repeat of medicines was 9,915. The total number of attendances including attendances for repeat of medicines was 38,697.

There remained in hospital on 31st December, 1946, 269 males, 232 females, giving a total of 501.

	M	F	Total
There were sent to Leprosy Hospital	2	1	3
There were sent to Mental Hospital	44	60	104
There were sent to Alms House	270	97	367
Deaths of children under 1 year	78	51	129
Deaths of children from 1 to 5 years	13	21	34

225 cases of Typhoid were treated during the year with 33 deaths. Of the 225 cases treated, 37 were from Georgetown with 5 deaths and 188 with 28 deaths from Country Districts.

The following table shows the number of cases and deaths from Typhoid Fever for the last five years:—

Year	No. of Cases	Deaths	Percentage
1942	103	18	17.5
1943	122	30	24.6
1944	214	38	17.8
1945	153	25	16.3
1946	225	33	14.7

Maternity Return for Year 1946.

No. of beds	Deliveries (Normal or Otherwise)	No. of Abortions	Deaths Maternal	Normal Births	No. of Still-births
88	1,832	72	24	1,626	163

RETURN OF CLASS OF IN-PATIENTS TREATED IN 1946

Seamen	66
Paying Patients	4,744
Policemen	496
Militiamen	179

RETURN OF RACE OF PATIENTS TREATED IN 1946.

Europeans (other than Portuguese)	152
Europeans (Portuguese)	506
Mixed	1,296
East Indians	4,424
Aborigines	126
Chinese	154
Blacks	8,484

Return of Novaremobillon and other injections for Syphilis, 1946.
25,393

LIST OF OPERATIONS, 1946.

	Operations	*Cases*	*Deaths*
HEAD AND NECK	Cranium	1	—
FACE	Face	8	—
	Eyelid	—	—
	Eye	1	—
	Nose	18	—
	Cheeks	5	—
	Jaws	21	—
	Lips	3	—
	Mouth and Pharynx	54	—
	Neck	23	—
UPPER EXTREMITY	Shoulder	4	—
	Axilla	1	—
	Upper Arm	6	—
	Elbow	5	—
	Forearm	15	—
	Hand	43	2
	Fingers	21	—
LOWER EXTREMITY	Hip	6	—
	Buttock	6	—
	Groin	6	—
	Thigh	42	1
	Knee	14	—
	Leg	52	—
	Foot	37	1
	Toe	9	—
THORAX AND CHEST	Thorax and Chest	64	7
	Breast	27	—
ABDOMEN	Abdominal Wall	76	6
	Laparatomy	61	15
	Hernia	211	6
	Rectum and Anus	157	—
BACK AND VERTEBRAE	Back and Vertebrae	8	—
GENITO URINARY SYSTEM	Kidney	2	—
	Bladder	4	—
	Prostate	24	—
	Urethra	31	—
GENITALIA	Male	271	1
	Female	290	5
	Total	1,627	44

Summary of the Report on the X-Ray and Electro-Medical Department, Public Hospital, Georgetown for 1946, by Major H. E. P. Yorke, Government Radiologist.

The Staff consisted of :—

Government Radiologist (as from 25th July)
One Radiographer and one Assistant Radiographer
One steno-typist (as from 26th August)
One Dark Room Assistant
Four nurses.

Dr. H. E. P. Yorke assumed duty on the 25th July. Mr. V. G. Connett, Government Radiographer, was in charge of the Department from the 1st January to the 3rd June, when he went on vacation leave. Mr. P. Elsip, assistant Radiographer, acted in charge until the arrival of Dr. Yorke.

The X-Ray Diagnostic Apparatus is in a very parlous condition and has to be very carefully nursed in order to prevent a serious break-down. It is considered that the accommodation in the existing Diagnostic Department is adequate and should remain so for some time.

The provision of X-Ray films etc., from the United Kingdom has not been altogether satisfactory and the Department was without films for the first week of January 1946, and again from the 9th March 1946, to the 18th May 1946, and the last quarter's supply of films for 1946 had not arrived at the end of the year.

X-Ray Therapy Department

There is a Diagnostic Tube erected in a shield which is being used for X-Ray treatment. The layout is however unsatisfactory, and the tube has to be energised by a Diagnostic Transformer. Consistent change-over has worn the parts so badly that it is likely that the parts will soon be unserviceable. The X-Ray treatment possible is only of use in superficial skin conditions, etc., and is of no use in cases of carcinoma. A total of 217 patients were treated during the year.

Electro-Medical Department

This department continues to do excellent work. The suggestion was put forward for the employment of a Masseuse in the hospital, of which there is great need. The transformer for the Inducto-therm has arrived and this machine is now functioning again. The total number of cases treated during the year was 345.

General

Sundry repairs and minor structural alterations were effected.

Revenue

The revenue for the year was $4 998.52.

APPENDIX V.

Summary of the Annual Report on the Public Hospital, Berbice, by Dr. N. J. Abbensetts, Resident Surgeon.

Accommodation

The bed accommodation of this hospital is as follows :—

Males	Females	Total
94	76	170

Staff

The staff of the hospital consists of the following :—

- One Resident Surgeon
- One assistant Resident Surgeon
- One matron
- Two supervisors
- One chief dispenser
- One assistant dispenser
- One steward
- Three hospital clerks
- Seven charge nurses
- Twenty-four staff nurses
- Twenty-nine probationers
- Three seamstresses
- Six cooks
- Thirteen laundresses
- Seventeen wardmaids
- Ten porters
- Eight other servants

Additions to the subordinate staff during the year in order to introduce the 3-shift system here were made possible by the approval to appoint eight more probationers, bringing the total number to 68. This was put into effect on the 1st September.

The daily average number of patients in hospital was	123
The highest number on any one day (9.1.46) was	162
The lowest number (30.6.46) was	103
The number of patients in hospital at 1.1.46 was	132
The number of cases admitted during the year was	3,554
The number of cases discharged during the year was	3,316
The number of cases who died during the year was	264
Remaining in hospital at 31.12.46	106

The principal diseases treated were :—

	Cases	Deaths
Malaria	402	29
Typhoid	49	14
Pneumonia	29	15
Dysentery	16	1
Tuberculosis	27	9
Diarrhoea and Enteritis	51	1
Venereal Diseases	158	7
Other Diseases	2,954	188

Laboratory

Much difficulty was experienced in getting the services of a Laboratory Assistant sufficiently qualified for work at this Institution after the death of Mr. E. A. Daniels.

No work was done for approximately five months.

Ambulance

502 calls were made and approximately 3,524 miles covered for the period 1st January to 4th September, 1946.

There was a major breakdown of the ambulance on 4th September, 1946, necessitating the ordering of a new cylinder block, which only arrived recently. During the month of January, extensive repairs were effected, viz., repairs to brake hoses, rewiring of tail light circuit, scraping and painting of chassis, and renewing of old woodwork.

On the whole, the running condition for this period was not quite satisfactory—mileage at times falling as low as 9 miles per gallon.

Official Visitors

His Excellency the Governor visited on 21st February, 1946, the Officer Administering the Government on 5th August, 1946, Dr. L. G. Eddey, Deputy Director of Medical Services on 27th August, 1946, and Dr. O. M. Francis, Acting Director of Medical Services on 8th October, 1946.

Nurses' Examination Results :

	Entered	Passed
Preliminary	12	8
Final	5	4
Midwifery	7	5

Dental clinics were held thrice weekly throughout the year, except on holidays, and on occasions when the Dental Surgeon was indisposed or had to be away on urgent business. 1,268 extractions were done.

In the out-patient department, 20,083 cases were treated.

The conduct of the staff was quite satisfactory, generally speaking.

APPENDIX VI.

Summary of the Annual Report on the Public Hospital, Suddie, for the year ended 31st December, 1946, by Dr. D. P. Wailling, O.B.E., Resident Surgeon.

Accommodation

The bed accommodation of this hospital is as follows :—

Males	*Females*	*Total*
45	47	92

Staff

One Resident Surgeon
One assistant Resident Surgeon
One Superintendent of nurses
Four charge nurses
Thirteen staff nurses
Six probationers
One steward
Two hospital clerks
One dispenser
One laboratory technician
One electrician
One apprentice to electrician
One carpenter
Two gatemen
Two ambulance drivers
Two seamstresses
Three cooks
Eight wardmaids
Six laundresses
Seven porters
One incinerator attendant

The conduct of the staff on the whole was satisfactory. There were two dismissals—Mr. A. Richards, Ambulance Driver, and Prettipaul, a porter.

Official Visitors

Dr. L. G. Eddey, Deputy Director of Medical Services, visited on 6th August, 1946, and Dr. O. M. Francis, Director of Medical Services, Acting on 10th September, 1946.

Hospital accommodation provided for 92 patients—45 males and 47 females. This proved to be inadequate at certain periods, and patients had to be accommodated on beds placed on the floor.

The highest number of patients treated on any one day was 126. This was 34 more than could be satisfactorily accommodated.

In the absence of an isolation ward, cases of infectious diseases were admitted into the general wards.

The grounds were well kept, and the buildings properly maintained so far as Public Works Department funds could afford.

The Rain Water supply was ample and good.

The food supply was of good quality, but at times there was great difficulty in procuring appropriate foodstuffs for nurses and patients resulting in isolated cases of dissatisfaction. All that was reasonably possible was done to ease the situation. The amount of $10.000 voted under the sub-head Dietary proved inadequate in view of the high prices of commodities, and the high daily average number of patients in hospital.

The wards of the hospital and the nurses' hostel were sprayed on the 18th December with a solution of D.D.T. by two employees of the Yellow Fever Service. The results up to the present time appear to be satisfactory.

The motor ambulance suffered a mishap on the night of the 2nd September when it turned turtle while returning from Charity. As a result it was out of service for some time, and the contract car was requisitioned to convey patients to hospital whenever it was necessary.

The electric lighting system was satisfactory.

The most important diseases treated during the year and the deaths resulting therefrom were :—

Diseases	Cases	Deaths
Typhoid Fever	13	5
Malaria Fever	295	23
Diphtheria	4	—
Amoebic Dysentery	17	—
Cerebrospinal Fever	1	1
Pulmonary Tuberculosis	10	4
Leprosy	2	—
Syphilis	19	2
Gonorrhoea	36	—
Yaws	10	—
Diabetes	15	3
Beri-Beri	1	1
Bronchitis	43	—
Broncho-pneumonia	4	—
Lobar-pneumonia	22	6
Acute Nephritis	13	2
Chronic Nephritis	54	10

APPENDIX VII.

Summary of the Annual Report on the Leprosy Hospital, by Dr. L. H. Wharton, Medical Superintendent.

Accommodation

The bed acommodation of this hospital is as follows :—

Males	Females	Total
280	125	405

Staff

The staff consists of :—

- One Medical Superintendent
- One Steward
- One Warden
- Ten nursing Sisters of Mercy
- Five hospital clerks
- One dispenser
- One laboratory technician
- One electrician
- One assistant laboratory technician

The subordinate staff consists of :—

	Male	Female
Senior Attendants	1	2
First Class Attendants	20	5
Second Class Attendants	32	17

Buildings

The Public Works Department was in charge of all buildings. Extensive repairs were carried out to the following buildings—16 cottages in the south block of the male compound; the Male Infirmary; the Cinema Hall; the attendants' Mess-hall; the Bishop Galton's Children's Home. Minor repairs were done to other buildings.

NEW BUILDINGS : The male pay patients' cubicle was completed. This building consists of 24 bedrooms, two sitting and dining rooms. Each patient will have a separate room. All visitors have complimented the patients on the construction of this building. It will add greatly to the amenities of the institution. The construction of the New Infirmary has made good progress. With the exception of the work on the New Infirmary and repairs to staff residences, all other repair work and constructions were done with patient labour.

Grounds, roads, water supply and sanitation generally have been well maintained. Spraying with D.D.T. has been of immense help in controlling insect pests. Difficulty was experienced with the lighting system owing to defectiveness of the electric lighting plant.

Dietary and clothing have been well maintained and despite scarcity of certain articles all essentials have been procurable.

Patients

There has been marked improvement in the behaviour of the patients, and the conduct on the whole has been good. The patients' clubs and societies have had a most beneficial effect on their demeanour. We are particularly grateful to the British Council for their very generous donations of books, magazines and pictures. This literature has done much to raise the educational and cultural standard of the patients.

The Boy Scout and Girl Guide troops have been active and Lady Baden-Powell's visit to this Hospital has done much to increase their zeal.

Social Life

There has been marked improvement in the social life of the patients during the year. Ladies and gentlemen from Georgetown have been coming out regularly to visit the patients and have given lectures and concerts for them. The patients have been very grateful for the interest that is being taken in their welfare, and are always anxious to learn from these visitors.

The patients themselves have organised dances, At Homes, concerts, plays, bazaars, and various competitions. A special feature of their cultural life has been a weekly broadcast programme over B.G. broadcasting station ZFY. Patients' musical compositions and requests are played for them, and the signature tune of the programme is a march : "The Spirit of Mahaica", which was composed by the conductor of the patients' band. This broadcast programme has brought the patients so much happiness that it has been extended to the Leprosaria in the West Indies, and patients from Trinidad, Barbados and Jamaica have been invited to take part in it and send in their requests.

Sports and Entertainment

Outdoor games consisted of cricket, football and tennis. The patients take the keenest interest in their games and arrange competitions among themselves. The annual athletic sports meeting was held and was a great success. The usual indoor games were indulged in, and table tennis is again a popular feature.

The cinema machines have given satisfactory service and thrice weekly films were shown. Indian pictures were shown as an extra whenever they were obtained. The radios, gramophones and pianos were kept in good repair. The patients' band has greatly improved and several new instruments were added to it. The band gave bi-weekly concerts in the male and female compounds. The male and female recreation rooms have been kept well supplied with games and magazines. The Entertainment Committee has taken the greatest interest in the welfare of the patients.

A special feature this year has been the replacing of benches in the Cinema Hall by chairs; this has been done by entertainment funds, and has greatly improved the appearance of the hall, and has added greatly to the comfort of the patients.

Occupation

Approximately 200 patients are employed monthly at an average wage of $6.00 per month each. Occupational therapy plays a very beneficial part in the mental rehabilitation of the patient.

Poor Law Doles

At the end of the year, 210 discharged patients were receiving an average monthly dole of $3.00 each. In-patients who are unable to work receive $1.00 a month as a dole. This has had a most beneficial effect in raising their morale. Needy children of infectious parents receive $5.00 a month.

Children's Homes

During the year the Lady Denham Home for non-infectious children had 16 children—12 boys and 4 girls. These children all attended school. They gave a concert during the year and staged a short play at the end of the prize distribution ceremony.

The Bishop Galton Home for infectious children had 20 patients—16 boys and 4 girls. The children all attended school. They have their own junior guild club, and games club. They staged a play during the year, and a concert and play at the prize distribution ceremony at the end of the year.

The proportion of children to adults in the institution is 1 to 9.3.

Donations and Gifts

We have been very fortunate in receiving many donations and gifts throughout the year. Among the many generous donors, I may mention the Demerara Turf Club for quarterly cheques from their Sweepstakes Fund; Messrs. Wm. Fogarty Ltd.; Bookers Drug Store; The Demerara Tobacco Co.; Mr. R. G. Humphrey; books, magazines and periodicals from Hon. W. L. Heape, C.M.G., O.A.G.; Dr. and Mrs. H. B. Hetherington; Dr. L. G. Eddey, D.D.M.S.; Hon. C. V. Wight; Mrs. R. M. Wight; The U.S.O. Club. Special mention must be made of the generosity of the British Council who has given us a large quantity of books to start our adult and children's libraries. We are also indebted to His Lordship the Bishop of Guiana for his annual feast and dance, and to Messrs. Boodhoo and Resaul Maraj for their annual dinners.

The Canteen

The canteen serves a very useful purpose and is popular with the patients. It continued to pay its expenses with a small margin of profit which is used for adding amenities and for the benefit of the patients. We were able to paint the canteen from its own funds.

Religious Observances

Religious services were held throughout the year by the Chaplains of all denominations, and services were well attended.

The Board of Official Visitors

The Official Visitors paid two visits of inspection during the year and took a keen interest in the welfare of the patients. Reports on their visits were submitted to Government.

School Survey

The first general leprosy school survey to be made in the Colony was completed during the year. It revealed that of 42,811 children examined, 94 early cases of leprosy were found. Of these, 3 were admitted to the hospital and 91 cases received domiciliary treatment and remained in their homes. A separate report on this interesting survey was submitted to Government. This survey showed an incidence of 2.2 per 1,000, which is high. The second general leprosy school survey was started in the third quarter of the year. A separate report on Georgetown findings was submitted to Government and a copy sent for the information of the Mayor and Town Council. It revealed that, of 9,418 children examined, 21 cases were found.

Visitors

Among the many distinguished visitors I have to mention His Excellency the Governor Sir Gordon Lethem, K.C.M.G.; Hon. W. L. Heape, C.M.G., Officer Administering the Government; Dr. H. B. Hetherington, O.B.E., Director of Medical Services, and Mrs. Hetherington; Hon. D. J. Parkinson, acting Colonial Secretary, and Mrs. Parkinson; Dr. O. M. Francis, acting D.M.S.; Dr. L. G. Eddey, D.D.M.S.; Lady Baden-Powell, World Chief Guide; Hon. A. M. Edun, M.L.C.; Major and Mrs. Yorke; Dr. Mary Lethem; Mr. A. W. Steward of the British Council; Mr. John Hodges of the British Council and Mrs. Hodges; Mr. H. Risely Tucker of the British Council; Mr. A. B. Smythe, Director of Public Works; Professor Bernard Blackstone; Capt. P. Jeffs, A.D.C.; Mr. Gregory Smith, District Commissioner of the Interior; His Lordship the Bishop of Guiana and Members of the Official Board of Visitors; Mrs. M. Bayley, M.B.E.; the Members of the Leprosy Board; Dr. Sankaralli, D.D.M.S., Trinidad.

Treatment

This consisted of the old treatment by Hydnocarpus oil and its derivatives, and an entirely new line of treatment by chemotherapy, especially drugs of the Sulphone group. By the end of the year, we had 130 patients under chemotherapy treatment, especially Promin. Sulphetrone and soluthiazole have also been tried. Appropriate treatment was given for intercurrent diseases, and electrical treatment where necessary. Surgical operations were performed whenever necessary. Specific treatment was given to the following :—

In-patients—300; No. of treatments—12,600.

There were 87 operations, mainly minor. The laboratory investigated 2,097 specimens.

Out-patient Clinics

Out-patients at various clinics were as follows:—

Clinics	*No. of Patients*	*Attendances*
Georgetown	307	957
New Amsterdam	113	279
No. 63 Corentyne	65	189
Mahaica	84	72
Essequibo (including Suddie, Anna Regina, Leguan Wakenaam and Bartica)	35	41

Visits

Fifty-one visits were paid to the Lodge Clinic, Georgetown, ten to the New Amsterdam and No. 63 Corentyne Clinics; six to Clinics on the Essequibo Coast, and seven to Clinics on the West Coast, Demerara.

Number of Patients

The following number of patients was seen by the Leprosy Board:—

	Men	*Women*	*Boys*	*Girls*	*Total*
Admitted	16	6	8	—	30
Discharged on parole	4	3	—	2	9

The new admissions were suffering from the following types of leprosy :—

BY CAIRO CLASSIFICATION.

Neural	N1	1	Lepromatous L1	9
	N2	2	L2	9
	N3	2	L3	4
Major	Tuberculoid	3		
		8		22

BY PAN AMERICAN CLASSIFICATION.

Tuberculoid	*Incharacteristic*	*Lepromatous*	*Total*
3	5	22	30

Patients admitted to hospital during the year :—

New Cases	30
Relapses	17
For intercurrent diseases	37
For economic reasons	15
Total	99

Births and Deaths

	Male	*Female*	*Total*
Births	7	3	10
Deaths	20	9	29

Death rate in hospital was 7.2.

Racial Classification of In-patients

Portuguese		Ab. Indian		African		Mixed		East Indian		Chinese		Europeans		Total	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
17	5	1	–	130	62	32	24	63	32	3	2	1	–	247	125

CONFERENCE

The second Pan American Leprosy Conference was held in Rio de Janeiro, Brazil, from 19th to 31st October, and the Medical Superintendent attended as the delegate from British Guiana. A detailed report on the Conference has been submitted to Government, but it may be of interest to mention here that this leprosarium was the only one in the British Empire to submit a scientific paper at the Conference.

CONCLUSION

We can look back on the year 1946 as one of definite progress in the treatment, public health and social aspects of Leprosy. It is gratifying to know that the research work at this leprosarium has reached a stage where it has been recommended by the British Empire Relief Association. The new group of Sulphone drugs has created a new era in the treatment of leprosy, and the outlook is more hopeful now than it has ever been.

APPENDIX VIII.

Summary of the Annual Report on the Mental Hospital, Fort Canje, Berbice, by Dr. A. W. H. Smith, Medical Superintendent.

Accommodation

The bed accommodation of this hospital is as follows :—

Males	Females	Total
419	329	748

Staff

The staff of this hospital is as follows :—

One Medical Superintendent
One steward
One bandmaster and acting warden
Two hospital clerks
One dispenser
One supervisor.

The Medical Superintendent (Dr. A. W. H. Smith) was absent on vacation leave in the United Kingdom from March to December, the post being filled by the appointments of :—

Dr. C .R. Subryan, Government Medical Officer of Health, from 15th to 31st March, 1946.

Dr. J. J. Cameron of Jamaica, from 1st April to 31st July, 1946.

Dr. J. W. D. Ferdinand, Senior Medical Officer, from 1st August to 24th December, 1946.

Official Visitors

(i) The Board of Official Visitors on 21st February, 1946.
(ii) His Excellency the Officer Administering the Government, Hon. W. L. Heape, C.M.G.. on 12th June, 1946.
(iii) The Deputy Director of Medical Services on 30th August, 1946.
(iv) The Acting Director of Medical Services on 8th October, 1946.
(v) The Lord Bishop of Guiana on 27th November, 1946.

Entertainment

Previous difficulties with regard to worn out parts having been overcome, the Cinema was again put into commission and regular programmes re-instituted.

Our thanks on behalf of the patients are very gratefully extended to the Film Trade and to all who have so generously assisted in this good work.

The following entertainments, spiritual and secular, were held during the year :—

Church Services	62
Band Concerts	46
Dances (Band attending)	30
Outside Band Performances	17
Stage-shows	1
Other Entertainments	2
Cricket Matches	40
Football Matches	82

Statistical Tables

The total number of patients treated was 710 (See Table G) as compared with 692 in 1945, and 724 in 1944. During the year, 190 patients were admitted while 94 were discharged and 49 died. The total number resident at the end of the year was 567. Other informative tables are appended.

MENTAL HOSPITAL ANNUAL REPORT 1946

NUMBERS REMAINING ON 31.12.45. ANALYSIS OF RESIDUES TABLE "A"

DISEASE	East Indians		Africans		Portuguese		Chinese		Ab. Indians		Other Europeans		Mixed		TOTALS		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T
Imbecility	1	5	10	6	—	—	—	—	—	—	—	—	2	1	13	12	25
Mental Deficiency	2	4	4	2	1	—	—	—	—	—	—	—	5	2	12	8	20
Epilepsy	4	5	11	2	1	—	—	—	—	—	—	—	1	2	17	9	26
Neurosis	—	—	1	—	—	—	—	—	—	—	—	—	1	—	2	0	2
Affective Psychoneurosis ...	1	4	2	5	—	—	—	—	—	—	—	—	1	1	4	10	14
Psychopathy	—	—	2	5	—	—	—	1	—	—	—	—	2	—	4	6	10
Acute Mania	12	7	16	12	—	1	—	—	—	—	—	—	1	1	29	21	50
Manic Depressive Insanity ...	4	2	14	10	—	—	—	1	—	2	—	1	3	5	21	21	42
Involutional Melancholia ...	10	—	16	4	1	—	—	—	1	—	—	—	2	1	30	5	35
Confusional Insanity ...	7	6	12	16	.1	—	1	—	—	1	—	—	5	5	26	28	54
Schizophrenia	2	3	15	9	—	—	—	1	—	—	—	—	5	6	22	19	41
Schizoid Types	1	—	3	5	2	—	—	—	—	—	—	—	1	—	7	5	12
Delusional Insanity	1	3	16	25	—	—	—	1	—	1	1	—	4	10	22	39	61
Presenility	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	1
Senile Dementia	6	3	23	3	—	—	—	—	—	—	1	—	2	1	32	7	39
G. P. I.	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1
Organic Insanity c Dementia	2	3	10	4	—	—	—	—	—	—	—	—	4	—	16	7	23
do. Toxic ...	—	—	4	6	—	—	—	—	—	—	—	—	1	4	5	10	15
Secondary Dementia	8	2	14	5	—	—	—	1	—	—	1	—	3	1	26	9	35
Alcoholic Insanity	1	—	1	1	—	—	—	—	—	—	—	—	—	—	2	1	3
Korsakloff	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Puerperal Insanity	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
Toxic Encephalopathy ...	1	—	1	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Toxic Delirium	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1
Epilepsy c Imbecility ...	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Myxoedema	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
Not Insane	1	—	2	—	—	—	—	—	—	—	—	—	—	1	3	1	4
TOTALS	64	47	177	122	6	2	1	5	1	3	3	1	46	42	297	223	
	111		299		8		6		4		4		88				520

MENTAL HOSPITAL ANNUAL REPORT 1946

ANALYSIS OF ADMISSIONS

TABLE "B"

DISEASE	East Indians		Africans		Portuguese		Chinese		Ab. Indians		Other Europeans		Mixed		TOTALS		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T
Imbecility	2	2	1	1	—	—	—	—	—	—	—	—	—	—	3	3	6
Mental Deficiency	2	2	2	1	—	—	—	—	—	—	—	—	—	—	4	3	7
Epilepsy	4	1	2	—	—	—	—	—	—	—	—	—	1	1	7	2	9
Neurosis	—	1	1	—	—	—	—	—	—	—	—	—	—	—	1	1	2
Affective Psychoneurosis ...	—	3	—	6	—	—	—	—	—	—	—	—	1	1	1	10	11
Hysteria	—	—	—	1	—	—	—	—	—	—	—	—	2	—	2	1	3
Psychopathy	—	—	2	1	—	—	—	—	—	—	—	—	—	—	2	1	3
Acute Mania	2	1	8	6	1	—	—	—	—	1	—	—	—	1	11	9	20
Manic Depressive Insanity ...	3	11	15	15	1	—	—	—	—	—	—	—	—	1	19	27	46
Involutional Melancholia ...	—	2	2	5	—	1	—	—	—	—	—	—	—	—	2	8	10
Confusional Insanity	—	1	—	2	—	—	—	—	—	—	—	—	1	—	1	3	4
Schizophrenia	3	1	4	15	1	—	—	—	—	—	—	—	4	2	12	18	30
Schizoid Types	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Delusional Insanity	—	—	4	1	—	—	—	—	—	—	—	—	—	—	4	1	5
Presenility	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Senile Dementia	1	3	—	1	—	—	—	—	—	—	—	—	—	—	1	4	5
Organic Insanity c Dementia	2	3	10	3	—	—	—	—	—	—	—	—	2	1	14	7	21
Alcoholic Insanity	1	—	—	—	—	—	—	—	—	—	—	—	1	—	2	—	2
Epilepsy c Imbecility ...	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	2	2
Not Insane	—	1	1	—	—	—	—	—	—	—	—	—	—	—	1	1	2
TOTALS	20	34	52	59	3	1	—	—	—	1	—	—	12	8	87	103	
	54		111		4		—		1		—		20				190

		M	F
(1)	No. of re-admissions within 12 months of discharge:	5	6
(2)	do. do. over do. do.	6	1
(3)	No. of those admitted twice previously	3	2
(4)	do. do. more than twice	1	0

Voluntary Admissions included in above figures: M 13; F 17 or 15.8%.

MENTAL HOSPITAL ANNUAL REPORT 1946

ANALYSIS OF DISCHARGES

TABLE "C"

DISEASE	East Indian		Africans		Portuguese		Chinese		Ab. Indians		Other Europeans		Mixed		TOTALS		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T
Mental Deficiency	–	1	1	–	–	–	–	–	–	–	–	–	–	–	1	1	2
Epilepsy	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Neurosis	–	–	2	–	–	–	–	–	–	–	–	–	1	–	3	–	3
Affective Psychoneurosis	–	2	1	5	–	–	–	–	–	–	–	–	2	1	3	8	11
Hysteria	–	–	–	1	–	–	–	–	–	–	–	–	1	–	1	1	2
Psychopathy	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	1	1
Acute Mania	1	1	2	–	1	–	–	–	–	–	–	–	–	–	4	1	5
Manic Depressive Insanity	2	6	10	10	1	–	–	–	–	–	–	–	–	1	13	17	30
Involutional Melancholia	–	1	1	2	–	–	–	–	–	–	–	–	–	–	1	3	4
Confusional Insanity	1	4	2	2	–	–	–	–	–	–	–	–	1	–	4	6	10
Schizophrenia	1	–	–	1	–	–	–	–	–	–	–	–	–	–	1	1	2
Schizoid Types	1	–	–	2	1	–	–	–	–	–	–	–	–	–	2	2	4
Delusional Insanity	–	1	1	2	–	–	–	–	–	–	–	–	1	–	2	3	5
Presenility	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1	1
Senile Dementia	–	2	–	1	–	–	–	–	–	–	–	–	–	–	–	3	3
Organic Insanity c Dementia	–	–	2	–	–	–	–	–	–	–	–	–	1	–	3	–	3
Alcoholic Insanity	1	–	–	1	–	–	–	–	–	–	–	–	1	–	2	1	3
Epilepsy c Imbecility	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	1
Not insane	–	–	3	–	–	–	–	–	–	–	–	–	–	–	3	–	3
TOTALS	7	20	25	28	3	–	–	–	–	–	–	–	8	3	43	51	
	27		53		3		–		–		–		11				94

N.B. 84% of above (35 M; 44 F) were discharged within 12 months of admission.

Discharges under Section 19—Nil.

MENTAL HOSPITAL ANNUAL REPORT 1946

Mental Diseases. ANALYSIS OF DEATHS TABLE "D 1"

DISEASE	East Indian		Africans		Portuguese		Chinese		Ab. Indians		Other Europeans		Mixed		TOTALS		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T.
Imbecility	1	—	1	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Epilepsy	1	—	1	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Affective Psychoneurosis	—	—	—	2	—	—	—	—	—	—	—	—	—	1	—	3	3
Psychopathy	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Acute Mania	1	1	—	—	—	—	—	—	—	—	—	—	—	1	1	2	3
Manic Depressive Insanity	1	—	1	2	—	—	—	—	—	—	—	—	—	—	2	2	4
Involutional Melancholia	—	—	1	1	—	1	—	—	—	—	—	—	—	—	1	2	3
Confusional Insanity	—	1	2	—	—	—	—	—	—	—	—	—	—	—	2	1	3
Schizophrenia	—	—	1	1	—	—	—	—	—	—	—	—	—	—	1	1	2
Delusional Insanity	—	—	—	4	—	—	—	—	—	—	1	—	—	—	1	4	5
Senile Dementia	1	1	2	2	—	—	—	—	—	—	—	—	—	—	3	3	6
Organic Insanity c Dementia	—	2	9	1	—	—	—	—	—	—	—	—	—	—	9	3	12
Secondary Dementia	—	—	2	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Not insane	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1
TOTALS	5	5	21	13	—	1	—	—	—	—	1	—	1	2	28	21	
	10		34		1		—		—		1		3				49

MENTAL HOSPITAL ANNUAL REPORT 1946

Physical Diseases.

ANALYSIS OF DEATHS

TABLE "D 2"

DISEASE	East Indian		Africans		Portuguese		Chinese		Ab. Indians		Other Europeans		Mixed		TOTALS		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T
Cerebral:																	
Haemorrhage	—	—	2	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Tumour	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Pulmonary:																	
Tuberculosis	1	—	1	2	—	—	—	—	—	—	—	—	—	—	2	2	4
Broncho-pneumonia	1	1	2	—	—	—	—	—	—	—	—	—	—	—	3	1	4
Lobar-pneumonia	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Oedema of Lungs	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
Cardiac:																	
Congestive Cardiac Failure ...	1	1	2	2	—	—	—	—	—	—	—	—	—	—	3	3	6
Vascular:																	
Cardio-vascular degeneration	2	1	6	3	—	1	—	—	—	—	1	—	—	—	9	5	14
Hypertension	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Chronic Nephritis	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Atheroma	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Infection:																	
Syphilis	—	—	2	1	—	—	—	—	—	—	—	—	—	—	2	1	3
Dysentery (Amoebic)	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Colitis	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Typhoid	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Encephalitis	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Cholecystitis	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Other Causes:																	
Senility	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Post-peritoneal Haemorrhage	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Anaemia	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
Exhaustion	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	1	2
TOTALS	5	5	21	13	—	1	—	—	—	—	1	—	1	2	28	21	
	10		34		1		—		—		1		3				49

MENTAL HOSPITAL ANNUAL REPORT 1946

ANALYSIS OF TOTAL Nos. TREATED — TABLE "E"

DISEASE	East Indian		Africans		Portuguese		Chinese		Ab. Indians		Other Europeans		Mixed		TOTALS		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T
Imbecility	3	7	11	7	—	—	—	—	—	—	—	—	2	1	16	15	31
Mental Deficiency	4	6	6	3	1	—	—	—	—	—	—	—	5	2	16	11	27
Epilepsy	8	6	13	2	1	—	—	—	—	—	—	—	2	3	24	11	35
Neurosis	—	1	2	—	—	—	—	—	—	—	—	—	1	—	3	1	4
Affective Psychoneurosis	1	7	2	11	—	—	—	—	—	—	—	—	2	2	5	20	25
Hysteria	—	—	—	1	—	—	—	—	—	—	—	—	2	—	2	1	3
Psychopathy	—	—	4	6	—	—	—	1	—	—	—	—	2	—	6	7	13
Acute Mania	14	8	24	18	1	1	—	—	—	1	—	—	1	2	40	30	70
Manic Depressive Insanity	7	13	29	25	1	—	—	1	—	2	—	1	3	6	40	48	88
Involutional Melancholia	10	2	18	9	1	1	—	—	1	—	—	—	2	1	32	13	45
Confusional Insanity	7	7	12	18	1	—	1	—	—	1	—	—	6	5	27	31	58
Schizophrenia	5	4	19	24	1	—	—	1	—	—	—	—	9	8	34	37	71
Schizoid Types	1	—	3	6	2	—	—	—	—	—	—	—	1	—	7	6	13
Delusional Insanity	1	3	20	26	—	—	—	1	—	—	1	—	4	10	26	40	66
Presenility	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	2	2
Senile Dementia	7	6	23	4	—	—	—	—	—	—	1	—	2	1	33	11	44
G. P. I.	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1
Organic Insanity c Dementia	4	6	20	7	—	—	—	—	—	—	—	—	6	1	30	14	44
do. Toxic	—	—	4	6	—	—	—	—	—	—	—	—	1	4	5	10	15
Secondary Dementia	8	2	14	5	—	—	—	1	—	—	1	—	3	1	26	9	35
Alcoholic Insanity	2	—	1	1	—	—	—	—	—	—	—	—	1	—	4	1	5
Korsakloff	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	1
Puerperal Insanity	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
Toxic Encephalopathy	1	—	1	—	—	—	—	—	—	—	—	—	—	—	2	—	2
Toxic Delirium	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1
Epilepsy c Imbecility	—	1	—	1	—	—	—	—	—	—	—	—	—	1	—	3	3
Myxoedema	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1
Not Insane	1	1	3	—	—	—	—	—	—	—	—	—	1	—	5	1	6
TOTALS	84	81	229	181	9	3	1	5	1	4	3	1	58	50	385	325	
	165		410		12		6		5		4		108				710

MENTAL HOSPITAL ANNUAL REPORT 1946

RACIAL ANALYSIS OF ADMISSIONS

TABLE "F"

Item	DISEASE	East Indian	Africans	Portuguese	Chinese	Ab Indians	Other Europeans	Mixed	TOTAL	% of TOTALS	No. per 100,000 T.C.P.
(1)	Confusional Insanity per 1,000 ‡	1 (.006)	2 (.01)	—	—	—	—	1	4	2	1
(2)	Organic Insanity per 1,000 ‡	5 (.03)	13 (.09)	—	—	—	—	3	21	11.1	6
(3)	Manic Depressive Insanity per 1,000 ‡	14 (.08)	29 (.2)	1	—	—	—	1	45	23.7	12
(4)	Schizophrenia ... ... per 1,000 ‡	4 (.02)	19 (.1)	1	—	—	—	6	30	15.8	8
(5)	Other Diseases	30	48	2	—	1	—	9	90	47.4	24
(6)	TOTALS	54	111	4	—	1	—	20	190	100	51
(7)	Item (6) expressed as % of total 190	28.4	58.4	2.1	—	.5	—	10.6	100		
(8)	Item (6) expressed as No. per 1,000 in its own racial class of T.C.P. ...	.34	.80	.05	—	.01	—	.25			

‡ Expressed as No. per 1,000 of its own racial class in Total Colony Population Figures.

T.C.P. Figures

East Indians	43%	161,602
Africans	37%	139,053
General Total		375,819

(Provisional Figures of Last Census of 9. 4. 46.)

MENTAL HOSPITAL ANNUAL REPORT 1946

SUMMARY OF NUMBERS, RACES & SEX

TABLE "G"

January to December 1946.	East Indians		Africans		Portuguese		Chinese		Ab. Indians		Other European		Mixed Races		TOTALS		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	T
Remaining on 1st Jan., 1946.	64	47	177	122	6	2	1	5	1	3	3	1	46	42	298	222	520
Admitted during the year	20	34	52	59	3	1	—	—	—	1	—	—	12	8	87	103	190
Discharged during the year	7	20	25	28	3	—	—	—	—	—	—	—	8	3	43	51	94
Died during the year	5	5	21	13	—	1	—	—	—	—	1	—	1	2	28	21	49
Remaining on 31st Dec., 1946.	72	56	183	140	6	2	1	5	1	4	2	1	49	45	314	253	567

The Maintenance Rate for the year 1946 was:—

Rate { Per caput } Calculated on the Diet Scales only 24.7c.
Per diem } Calculated on the Total Votes 83.3c.

MENTAL HOSPITAL ANNUAL REPORT 1946

SUMMARY, CHRONOLOGICAL & PERCENTAGES

TABLE "H"

YEAR	Total Number Treated	Daily Average No. Resident	Admitted (Including Re-admissions)	Discharged (Including Transfers and Abscondings)	DIED	% OF DISCHARGES		% OF DEATHS		No. of Re-admissions within 12 months of Discharge	% of Re-Admissions (on Last Year's Admissions)	AVERAGE STAY IN MONTHS OF THOSE			
						On Daily Average No. Resident	On Total Admissions	On Total No. Treated	On Daily Average No. Resident			Discharged	DIED	Remained	Average
1936	803	720	97	24	49	3.3	24.7	6.1	6.8	—	—	—	103	123	—
1937	825	725	95	26	92	3.6	27.4	11.1	12.7	6	.25	20	112	120	84
1938	806	634	99	28	150	4.4	28.8	18.6	23.7	1	4.41	22	153	250	142
1939	762	611	134	36	115	5.8	26.8	15.1	18.8	2	7.14	26	146	140	101
1940	751	605	142	44	101	7.2	30.9	13.4	16.7	5	14.2	17	127	147	97
1941	727	619	104	41	59	6.6	33.1	8.1	9.6	2	4.5	16	108	145	90
1942	758	629	151	72	69	11	47.7	8	10.9	2	4.3	18	142	47	69
1943	773	597	137	70	172	11.7	51.1	22	29	5	6.9	18	131	40	63
1944	724	508	193	113	105	22.2	58	14.5	20.7	6	4.4	20	126	39	62
1945	692	525	186	86	86	16.3	46.2	12.4	16.3	12	6.5	17	128	38	61
1946	710	537	190	94	49	17.5	49.5	6.9	9.1	18	9.5	11	59	38	36

CRUDE BIRTH RATE

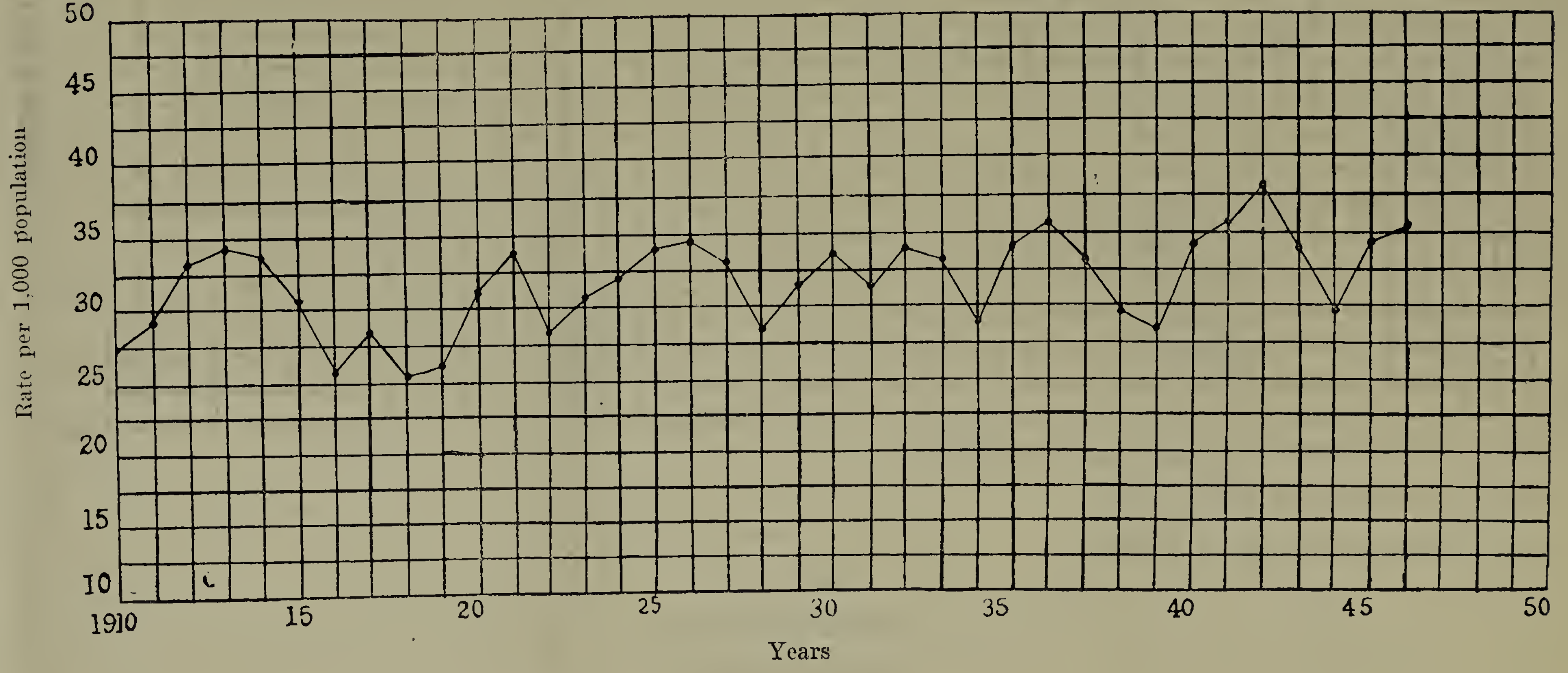
BRITISH GUIANA

per 1,000 population

High—38.2 per 1,000 population—1942

Low—25.1 per 1,000 population—1918

England & Wales—1944—18.0 per 1,000



CRUDE DEATH RATE

BRITISH GUIANA

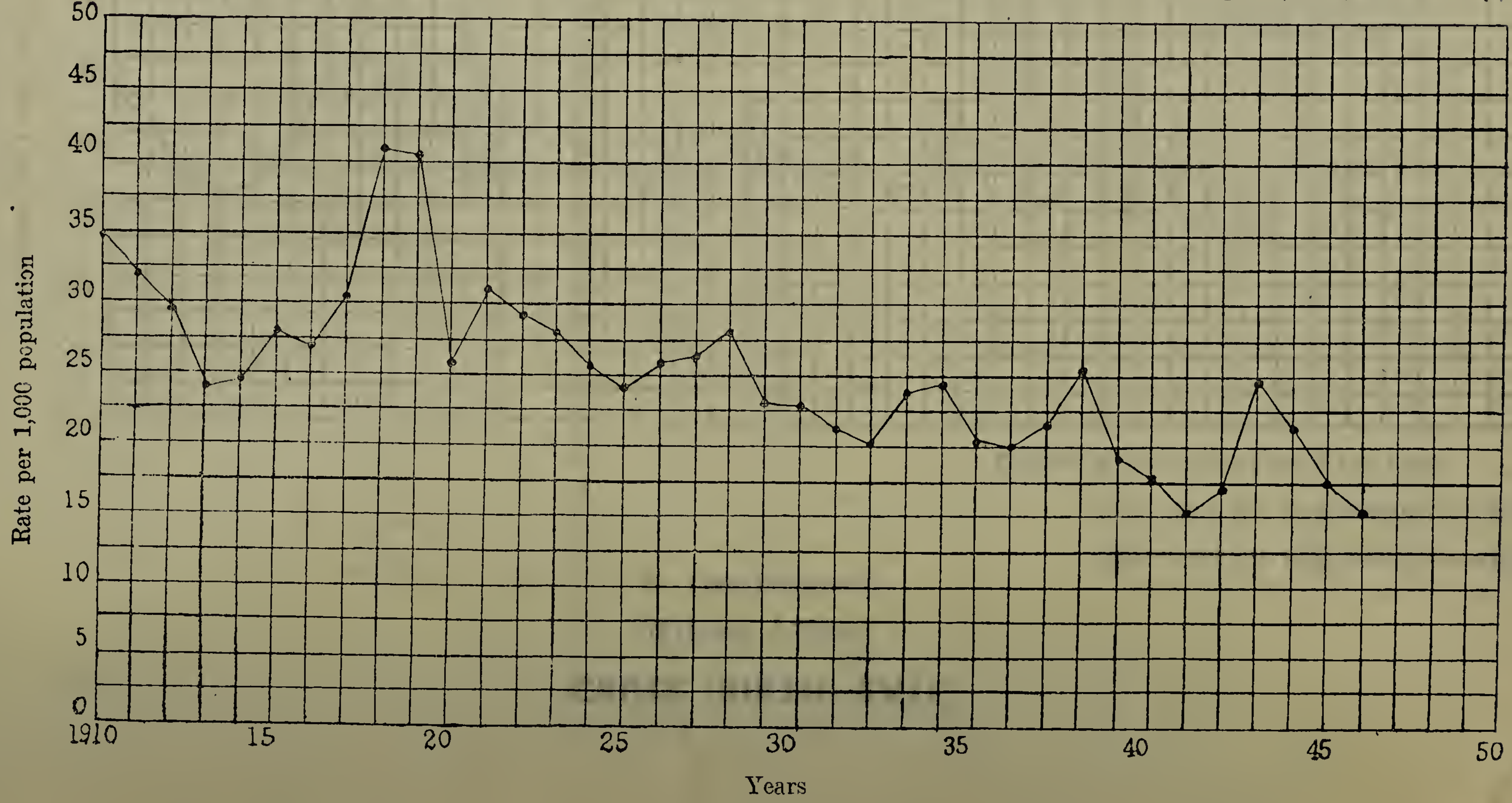
(per 1,000 population)

1910—1946.

High—40.6 per 1,000 population—1918.

Low— 15.6 per 1,000 population—1941.

England & Wales—1944—9 per 1,000 (civilians only)



INFANT MORTALITY RATE

BRITISH GUIANA

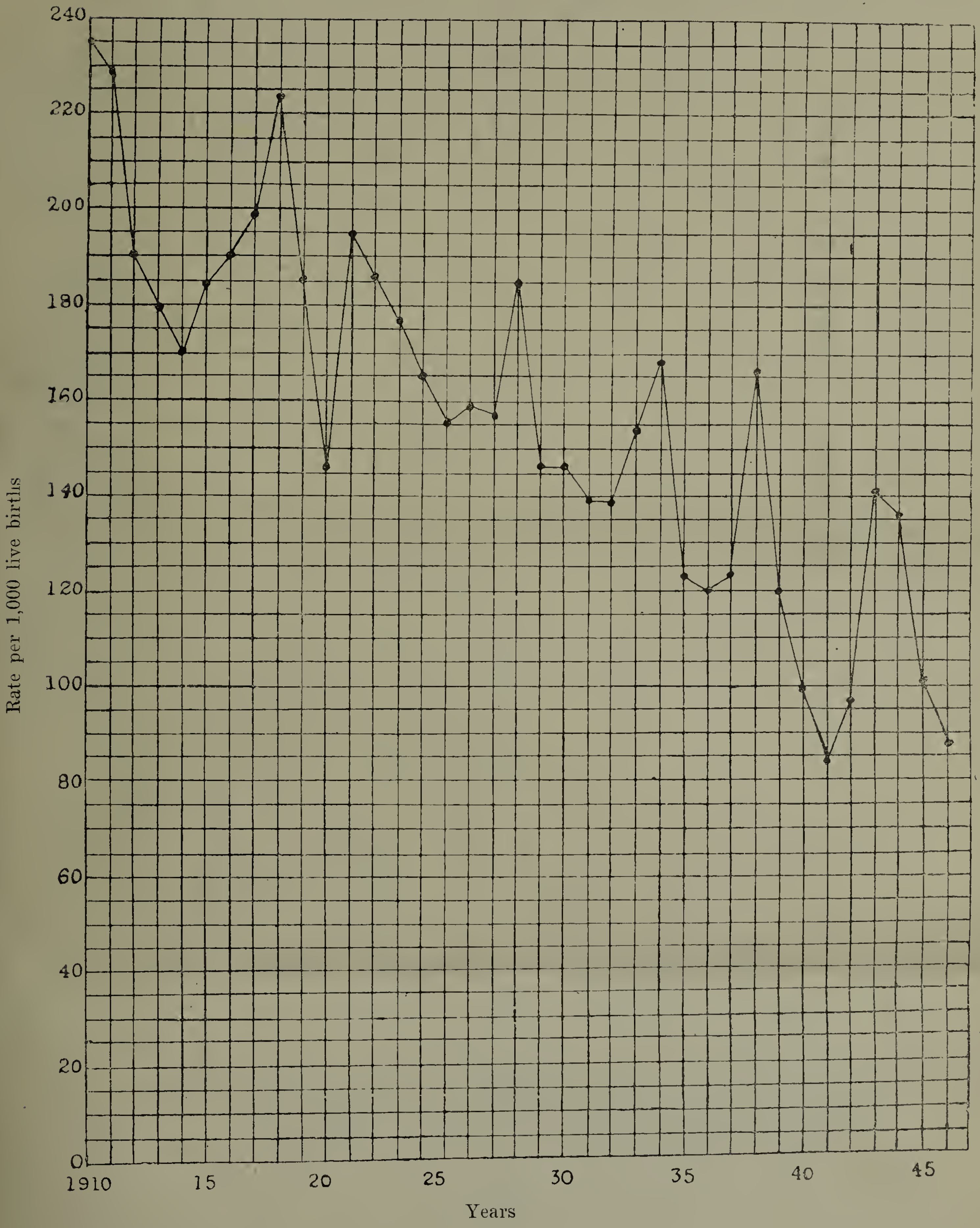
Deaths of children under 1 year
per 1,000 live births

1910—1946.

High—235 per 1,000 births—1910.

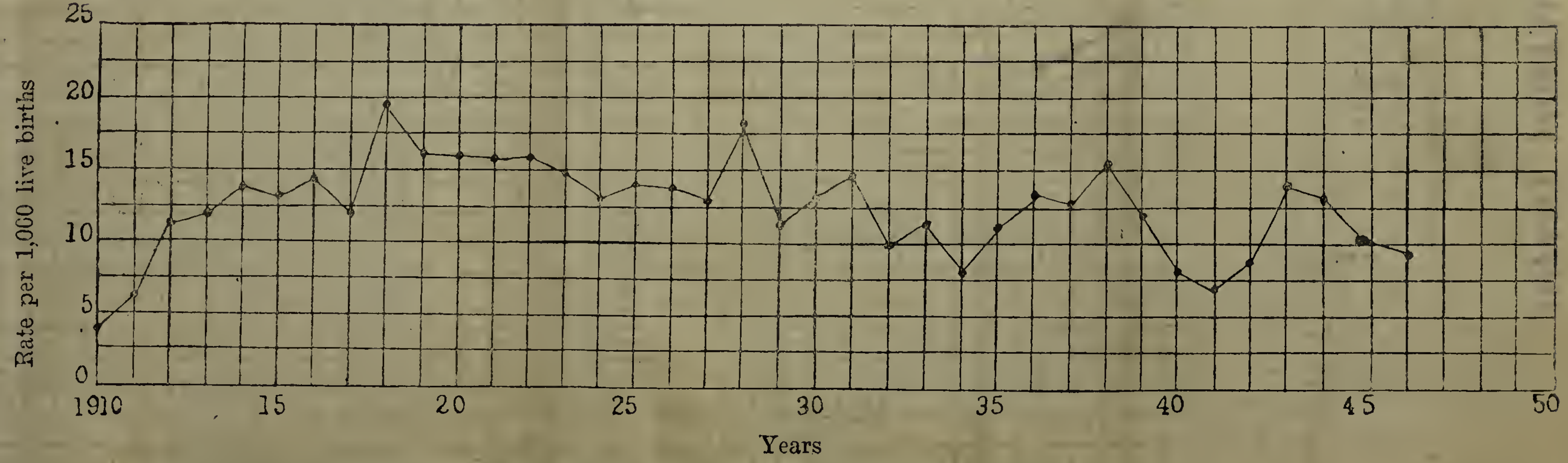
Low— 84 per 1,000 births—1941.

England & Wales—1944—46 per 1,000 births.



MATERNAL MORTALITY RATE

BRITISH GUIANA
per 1,000 live births
1910—1946.



High—19.5 per 1,000 births—1918.

Low— 4.2 per 1,000 births—1910.

England & Wales—1931—1935

High—4.6; Low 3.8 & 2.4 in 1944.